Lectures

ON THE

RECENT ADVANCES OF OUR KNOWLEDGE IN THE DIAGNOSIS AND TREATMENT OF FUNCTIONAL NERVOUS AFFECTIONS.

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LECTURE I.

GENERAL REMARKS ON THE CAUSES, DIAGNOSIS, AND TREATMENT OF FUNCTIONAL NERVOUS AFFECTIONS.

(*Concluded from page* 141.)

VIII. *Improvement of the blood, and elimination of certain poisons.*—I will only make a few remarks under this head. Modes of treatment consisting in attempts to furnish to the blood substances which are deficient either in itself or in the tissues (such as iron in cases of chlorosis and anæmia, or phosphorus in certain nervous affections and in cases of seminal losses), or to prevent certain secretions (as that of sugar in diabetes), are gradually being replaced by sounder therapeutic principles grounded on a better knowledge of the causes of the alterations of the blood, or of nutrition and secretion, and also on a better appreciation of the immense value of hygienic means to improve the condition of the blood and the great organic functions. For instance, it has been shown by Sandras, Dalpiaz, Becquerel, Eismann, and others, that chlorosis is a nervous affection, and that the deficiency of iron in the blood of chlorotic patients occurs only after this affection has existed some time, and is an effect instead of a cause. It has been further shown that iron serves to cure that affection only on account of a peculiar influence which causes the food to be transformed more easily into blood, and perhaps, also, of a direct improvement in the nutrition of the nervous centres. Other metals, which are not normal constituents of blood-globules, especially manganese and silver, (particularly the oxides of these metals,) sometimes act better than iron in cases of chlorosis and anæmia. He who will read attentively the remarkable papers of Bouchardat on the pugilist's training, and on the rapidly curative effect of exercise and good food in diabetes,* will soon be convinced of the immense value of purely hygienic means in improving nutrition and secretion. It is quite natural, therefore, that gradually the idea is being abandoned that whenever a principle is diminished in quantity in the blood or in the tissues, the best treatment consists in trying to increase its amount by giving as a remedy the deficient substance. The selection of a remedy as a tonic or a stimulant ought, therefore, to be quite independent of any such chemical view, and we ought to let a good diet and all the principal rules of hygiene take care of the composition of the blood, remembering, however, that it may be useful to the patient to employ the kinds of food which we know to contain, in easily absorbable forms, iron, phosphorus, or some other substance which seems to be in insufficient quantity in the blood or in the tissues.

As regards the elimination of mineral poisons which have produced functional nervous affections, I will only say at present that the discovery of Melsens, which shows the value of large doses of the iodide of potassium for the expulsion of lead and mercury from the system, has been universally recognised. It is important to remember that the dose of that salt must be very large for its successful influence. The statements of Melsens and N. Guillot on this point have received positive confirmation from researches by Dr. W. Budd of Bristol and Prof. Easton of Glasgow. My own observations agree with the conclusions of these able physicians. The elimination of lead and mercury takes place chiefly by the urinary, salivary, and cutaneous secretions. Consequently saliva must be spit and the skin very frequently washed, so as to avoid a partial absorption of these poisons after they have been secreted.

I will not speak of the elimination of morbid poisons (such as those of diphtheria, rheumatism, gout, syphilis, leprosy, &c.) having produced nervous affections, because nothing of great importance has been found recently that applies to all, or almost all, those poisons. The only fact worth mentioning is, that the iodide of potassium may serve for the elimination of all but one of them.

IX. *Special use of anæsthetics.*—I have already said that chloroform, taken by inhalation, may be useful as a means of preventing an expected attack of hysteria, of epilepsy, &c. I will now point out the importance of inhalations of chloroform in three particular kinds of cases.

1st. When the comatose state due to uræmia or following a violent attack of epilepsy is frequently interrupted by tonic or clonic spasms of the respiratory muscles, increasing the profoundness and duration of the coma, I have employed inhalations of chloroform without any appearance of greater harm than is usual in surgical cases, and with the beneficial result of shortening the duration of the stupor by preventing the spasmodic contractions or diminishing their violence. This mode of treatment is known to be particularly useful in almost analogous circumstances—i. e., in cases of puerperal convulsions.* In many cases of epilepsy in which a large number of attacks usually occurred in a day or a day and a half (such a series of seizures being followed by complete freedom from fits for three, four, or six weeks), and in which also a comatose state usually appeared soon after a few attacks had taken place, I have found the benefit due to chloroform to be very great, the fits being much lessened in frequency and violence, the comatose state rendered shorter and less profound, and the period of great mental aberration after the cessation of the coma considerably diminished.

2nd. In the maniacal or delirious state due to hysteria, epilepsy, or uræmia, and also in cases of aggravated chorea preventing sleep, chloroform is of immense service, particularly if morphia or some other somniferous remedy is given to the patient, either by the hypodermic method or by injection into the rectum, as soon as chloroform has produced sleep. Dr. Briquet states that nine times out of ten he has stopped attacks of hysteria by inhalations of chloroform. I have not been quite so successful as Dr. Briquet in cases of hysterical convulsions, but attacks of delirium and mania due to hysteria are almost always quickly brought to an end by chloroform.

3rd. In the case of a gentleman who had pretty regular weekly attacks of epilepsy, I once employed chloroform by inhalation, almost without interruption for two or three days successively, with the object of preventing the expected fit or fits. It was of the greatest importance in that case to prevent a fit, as the patient in a preceding attack had fractured and dislocated one of his arms. The inhalations of chloroform saved him from the expected attack, and the callus had time to be formed before he had another fit. This patient was seen with me by Mr. Robert Dunn.

X. *Recent advances of our knowledge as regards the mode of action, the mode of administration, the doses, the antagonism, &c., of remedies against functional nervous diseases.*—I only wish to make a few remarks on these various subjects, for if I tried to speak at length of each of them I should be led too far. I begin by what relates to the real mode of action of the remedies used against the neuroses.

1st. *Mode of action of remedies.*—I have already spoken of the influence of remedies irritating the skin. I will now only discuss their mode of action after they have entered the blood. If we only had to know what is the effect caused by remedies on the brain, on the spinal cord, on the heart, &c., we might think that the extent of our knowledge of the mode of action of remedies is indeed considerable; but if we are not contented with this half-way knowledge, and wish to understand by what mechanism, by what direct or indirect influence, these effects are obtained, we find that very little is known as regards the real and ultimate mode of action of remedies. This is much to be lamented, as therapeutics will cease to be empirical only when this last kind of knowledge shall be fully obtained.

* See Supplement à l'Annuaire de Thérapeutique pour 1861, and the paper on the Treatment of Diabetes, pp. 291-336 in l'Annuaire de Thérapeutique pour 1866.

* The value of chloroform in puerperal convulsions is conclusively shown by the following facts, reported in a prize essay by Dr. Liégard, of Caën. As there is usually one case of eclampsia in 200 confinements or deliveries, and as before chloroform was in use there was one death out of two cases of that convulsive affection, there should have been 20 deaths from it (without counting the deaths of a number of children) out of 10,000 deliveries, in which, however, there was no death from that cause—a result which Dr. Liégard justly attributes to the use of chloroform.

We can, however, hope now that the time is not far distant when the ultimate mode of action of the most powerful remedies will be pretty well known. We shall then be enabled to employ them in cases that can really be benefited by them, and to avoid making use of them in cases in which we sometimes blindly order them, producing nothing but bad effects. Notwithstanding the great difficulties attending researches on the real mode of action of remedies, I have a great hope that much will soon be done in that important subject, and I ground my hope on the results already obtained by several experimenters on the mode of action of strychnine, of woorara, and a few other poisons and remedies. Another ground for my hope of great and rapid advances on this subject is that the difficulties are becoming well known, and means of overcoming them are being found. Among the difficulties there are some depending on the number of parts on which the remedies might act to produce their effects, and others depending on the fact that physiologists and toxicologists, in making researches on remedies, have employed toxic doses. This last fact is very unfortunate, as a number of remedies may have quite opposite actions in remedial and in toxic doses. As regards the number of parts on which remedies might act to produce their effects, I will show by a few examples what the difficulties are. Let us, for instance, try to find out on what part a remedy acts to produce the constriction of the pupil. It may do so either by paralysing or exciting certain parts of the nervous system or of the iris. If it paralyses, it may be either a part of the spinal cord or medulla oblongata, from which originate the cervical sympathetic nerve, or that nerve itself in some part of its length from the eye to the spinal cord, or also the radiated or dilator muscular fibres of the iris. If its action takes place through an excitation, the part acted on may be the base of the brain near the origin of the third pair of nerves, or that of the fifth pair of nerves; or it may be the iridian fibres of the third pair, or some fibres of the ophthalmic branch of the fifth pair of nerves; and it may be also the annular muscular fibres or sphincter of the iris. The other kind of difficulty I have mentioned arises from the fact that a remedy can produce with different doses two opposite effects. Belladonna, for instance, by its influence on the bloodvessels of the spinal cord, will diminish sensibility, the reflex faculty, the tendency to convulsions, &c.; but if the dose is toxic, there will be a morbidly increased sensibility and reflex faculty, and convulsions will occur. In both cases probably there is, at first, the same effect—i. e., a contraction of the bloodvessels of the spinal cord; but in the second case the contraction is so great that the muscular fibres of the bloodvessels are soon exhausted, and become paralysed, allowing a considerable congestion to take place in the spinal cord.* I will not say more on the real mode of action of remedies; but, before passing to another subject, I may refer those persons who desire to enter into original researches in this vast and fertile field of inquiry to an admirable paper that may serve as a model for such researches; I mean the paper published by MM. Martin-Magron, and Buisson, in my journal, on the Action of Strychnine compared to that of Woorara (see *Journal de la Physiologie de l'Homme et des Animaux*, vol. ii., 1859, and vol. iii., 1860).

2nd. *Analogies and differences of remedies.*—The more we progress in our knowledge of the mode of action of remedies, the more we find that *a priori* notions, only grounded on the chemical properties of substances which we try as remedies, are very rarely verified. On the one hand, if we compare the effects of salts of the same base or those of the same acid, we find that they vary extremely, even when the salts we compare are isomorphous. On the other hand, there are sets of remedies which have no chemical resemblance whatever, and which will, however, produce a great many similar effects. The recent advances of our knowledge as regards the action of belladonna, the ergot of rye, and the bromide of potassium, afford an interesting illustration of this statement. These three remedies are very useful against incontinence of urine, seminal losses, satyriasis, hyperæsthesia (general or localized in the œsophagus, the neck of the uterus, the sphincters of the bladder and of the anus), epilepsy, the whooping-cough, photophobia, a constriction of the pupil, a congestion of the spinal cord or its meninges, albuminuria, &c. There are, however, marked differences in the degree of remedial power of these remedies against those morbid states. For instance, the ergot of rye is more powerful than the others against albuminuria and congestion of the spinal cord and its membranes; the bromide of potassium is more powerful than the others against epilepsy, satyriasis, &c.; and belladonna against the whooping-cough, hyperæsthesia, incontinence of urine, constriction of the pupil, photophobia, &c. Most of these remedial effects are evidently due to a contraction of bloodvessels, as are also other effects—such as the stoppage of hæmorrhages and of the mammary and salivary secretions produced by belladonna and the ergot of rye.*

I will not say much as regards the differences of action of remedies which chemistry might lead us to suppose more or less similar one to the other in their remedial influence. The proofs of the dissimilarity of action of these substances are very abundant. I will only mention a few at random. If we compare the effects produced by the chlorides of a base with those of an iodide or a bromide of the same base, we find that they differ widely. If, on the other hand, we compare the chloride of barium with another chloride, we find that there is also between them a very great difference of action on the animal or on the human economy. So it is, although to a less degree, with the bromide of potassium compared with the bromide of ammonium or the bromide of iron.†

I have mentioned these facts to show that we are to look to experiments on animals, and to careful trials on man, to learn the physiological and therapeutical effects of remedies, and that chemical analogies cannot lead to any conclusion as regards the action of remedial substances.

3rd. *Modes of administration of remedies.*—One of the most important advances in therapeutics in our days consists in the method of subcutaneous injections of remedies. Led by the idea of applying narcotics directly on nerves attacked with neuralgia, Dr. Alex. Wood, of Edinburgh, opened this new field in therapeutics in 1855. Since that time many practitioners have found that hypodermic injections are often the best mode of administration of remedies, not only against local affections, but also against every form of functional nervous complaints, and also against gout, rheumatism, fever and ague, &c. Much credit is due to Mr. Charles Hunter for his researches on this new therapeutical method. To him more than to any other investigator we owe the solid grounding, if not a complete demonstration, of these three propositions:—1. That equal effects follow distant and local injections in neuralgic cases. 2. That by distant injections (in various places) the ill-effects of repeated local injections are avoided. 3. That diseases can be treated with benefit by this plan, which are neither local nor neuralgic. This method of administering remedies, which is now very extensively used, has very great advantages over most of the other methods. I will only point out a few of these advantages:—1. Rapidity of effect. 2. Certainty that the remedy will not run the risk of being decomposed by food, secretions, or faeces, as may be the case in the digestive tube. 3. Possibility of introducing safely into the circulatory system a much larger dose than by other methods. This last advantage is the principal one in the use of the hypodermic method against neuralgia. This explains how neuralgic patients who had taken apparently large doses of narcotics by the mouth, with no permanent and even no temporary marked benefit, are sometimes completely cured by one or by a few hypodermic injections of narcotics—a fact which has been observed by Dr. Alex. Wood, Dr. Courty, Dr. Béhier, Mr. Charles Hunter, myself, and many others.

I have ascertained that a subcutaneous injection can be as useful when made at a great distance from the place of a pain (whether neuralgic or inflammatory) as when made on that very place. Even in cases of traumatic neuralgia, I have seen, as Dr. Mason Warren has before me, that distant injections can be as good as local injections. Still, although agreeing

* When bloodvessels in the ear and face of a dog are made to contract considerably by a very powerful galvanic excitation of the cervical sympathetic nerve, we find that after a short time they become exhausted and paralysed, and that, consequently, they dilate as much as when their motor nerve is divided and paralysed.

* I cannot say if the bromide of potassium would also be useful against a hæmorrhage; but this is exceedingly probable. For the sake of brevity, I have not given the names of the observers who have ascertained the usefulness of the three above-named remedies in so many nervous and other morbid states or affections. I think, however, I should say: 1st, that the influence of the bromide of potassium against photophobia has been particularly demonstrated by Messrs. Cambron and Rossignol, who use it as a collyrium (two parts for thirty of water); 2nd, that Prof. Von Willebrand has shown that the ergot of rye is, like belladonna, an excitant of the unstriped muscular fibres of the bloodvessels of the eye, and able consequently to diminish vascular congestion in that organ as in the spinal cord; 3rd, that Dr. Poyet and Dr. Commarmond have found that rye-bread containing the ergot, like belladonna, stops the mammary secretion; 4th, that the researches of Dr. Addinell Hewson, made on seventy-eight boys attacked with nocturnal involuntary emissions of urine, have given a decisive confirmation of the great therapeutic value of both the bromide of potassium and belladonna in that affection.

† Dr. Chas. Bland Radcliffe has ascertained that the bromide of iron has no efficacy against epilepsy.

thus far with Mr. C. Hunter, I would recommend local injections, particularly in the cellular tissue round the sheath of a superficial nerve, in cases of tetanus, hydrophobia, epilepsy, or any other neurose due to a wound, as there is no doubt that a little more of the narcotic will then be brought to the wounded or irritated nerve-fibres than when the injections are made in a distant part.

Six or seven years ago I was led by the knowledge of the antagonistic effects of morphia and atropine on the brain to inject these two agents together, so as to reap the benefit of the good effects of the one added to those of the other against pain. The doses I at first employed were half a grain of the sulphate of morphia to one-sixtieth of a grain of the sulphate of atropine. For reasons to be mentioned hereafter, I now employ from one-half to two-thirds of a grain of the sulphate of morphia with one-twentieth or one-twentyfifth of a grain of the sulphate of atropine. Great advantages are obtained by this combination: 1, an addition of the good effects against pain of the two remedies; 2, the possibility of employing safely, or at least without great cerebral disturbance, large doses of these narcotics.

The hypodermic mode of administration of remedies has already proved useful in cases of headache, vertigo, delirium, mania, hysteria, epilepsy, eclampsia, chorea, tetanus, neuralgia, and all kinds of pain, &c. As regards the substances employed heretofore in injections, besides the two principal, morphine and atropine, I will only name strychnine, veratrine, narceine, and cyanhydric acid. This last remedy has especially been used, and with great benefit, by Dr. D. Macleod, in cases of acute and chronic mania, of puerperal or menstrual mania, of melancholia, and of epilepsy. He employed from two to six drops of Scheele's diluted acid with thirty drops of water.

The interesting experiments of Dr. B. W. Richardson, by which he thought he had found a valuable mode of producing local anæsthesia, have led Dr. Aug. Waller to a very important discovery. He has found that certain substances, such as atropine, strychnine, morphine, and the tincture of aconite, when mixed with chloroform and applied on the skin, are absorbed very rapidly; while if alcohol, instead of chloroform, is mixed with the above substances, absorption is much delayed or even altogether prevented. The possibility of introducing rapidly into the blood the most active narcotics and other remedies without having to perform the operation of hypodermic injection will prove of great value in those cases in which an operation, however slight, is much dreaded, and in cases in which it may be found necessary to keep the patient for a long time under the influence of the treatment (for instance, in tetanus, in hydrophobia, in persistent neuralgic pains, &c.)

Within the last ten or fifteen years several facts of importance as regards the selection of the proper surface of absorption of certain remedies have been clearly made out. I will only mention the following:—1. Prof. Bernard and other observers have ascertained that woorara is hardly absorbed by the mucous membranes of the mouth and stomach, while it is very quickly absorbed when put in contact with the subcutaneous cellular tissue. 2. Mr. W. S. Savory has ascertained that strychnine is absorbed so much quicker by the mucous membrane of the rectum than by the stomach, that a dose only one-fourth of another will act with greater energy in the rectum than the much larger dose in the stomach.* 3. I have found that ointments of belladonna and opium employed against neuralgic and other uterine pains act with greater rapidity and much more benefit when pushed up on a small lint ball in the rectum than in the vagina, showing that absorption is more rapid by the mucous membrane of the rectum than by that of the vagina. Not long ago the method consisting in applications of narcotics on the skin, deprived of its epidermis by a blister, was rather thrown into the shade owing to the superiority of the hypodermic method. I protest, however, against the abandonment of a method which has the double advantage of counter-irritation and rapid absorption of a narcotic, and which may sometimes prove more useful than subcutaneous injections. In a case of crural neuralgia which had not been markedly benefited by hypodermic injections of morphia and atropine, I have obtained a quick amelioration and ultimately a cure from a series of blisters (by the hartshorn ointment) and applications of sulphate of morphia on the denuded dermis.†

* According to Charpentier, jun., hyoscyamine, daturine, and atropine produce their effects quicker after having been injected in the rectum than by the hypodermic method. If so, this method will soon be abandoned. It is most likely, however, that the statement of Charpentier will not be confirmed.

† I do not speak of a new mode of administration of narcotics proposed by M. Lafargue (Bulletin de Thérapeutique, Jan. 15th, 1861), as I do not see any advantage in it over the hypodermic method. It consists in the introduction under the skin of small hard cylinders composed of a mucilage, with a little powdered sugar and the usual dose of atropine, morphine, strychnine, veratrine, &c.

Of two other methods of administration I will only say a few words. One of them is the inhalation of pulverized fluids; the other the use of medicated cigars or cigarettes. Hyoscyamus, stramonium, belladonna, and many other remedies may be employed with advantage by one or other of these means, not only in asthma, but in whooping-cough, in laryngismus, and also in tetanus, in hysterical aphonia, &c.

4th. *Selection of remedies.*—The time is fast coming when many complex remedies will be but seldom employed, and their active principles almost exclusively used. Belladonna, the preparations of which are so extremely variable in strength, and on which, therefore, we can place but little reliance, will be one of the first remedies abandoned, to be replaced by its active principle, which possesses all its physiological and therapeutic properties. But some complex remedies, such as opium, and particularly its tincture, will escape the fate of belladonna and others, owing to the fact that its effects cannot be fully obtained by the use of any of its great variety of active principles. Besides, in some remedies which seem to contain but one active remedial principle, there are physiological and therapeutical influences which appear not to exist in the only yet known active principles. This is said to be the case with cantharidine, which does not seem to have the power of the tincture of cantharides on the genital organs. Amongst the active principles which are now replacing the complex substances from which they are extracted, I will name atropine, veratrine, the valerianic acid, digitaline, hyoscyamine, and even aconitine, notwithstanding the real worth of Fleming's tincture of aconite, and notwithstanding also the assertion (which my experience contradicts) of Schroff, that aconitine acts differently from aconite.

5th. *On antagonism between certain remedies.*—It would be out of place in this lecture to enter into details on this important subject. I cannot, however, avoid saying a few words, at least, on the antagonistic effects of remedies which are so frequently employed together in cases of functional nervous affections. I will first speak of the antagonistic properties of opium compared with belladonna, with stramonium, with alcohol, and with quinine. The antagonism of belladonna and opium has been known for centuries. Recently, however, more accurate notions have been obtained on this subject, owing particularly to the researches of Dr. C. C. Lee, Dr. W. F. Norris, Prof. Béhier, and Drs. S. W. Mitchell, Morehouse, and Keen. From the researches of these practitioners and experimenters, as well as from my own, it results that, besides the well-known antagonistic effects of these two remedies on the eye, there is a decided antagonism between them as regards their effects on the heart, on the brain, and on the spinal cord. In consequence of this antagonism the dose of opium to produce sleep ought to be greater than usual if belladonna is employed with it, and also the dose of belladonna against reflex paraplegia ought to be greater than usual if the patient is also taking opium. I might say the same thing as regards the antagonism between opium and stramonium or hyoscyamus.* We owe to Dr. Gubler the discovery that in many respects, and particularly as regards the action on the brain, quinine is antagonistic to opium, and that it is wrong to employ these two remedies together. Many facts tend to show also that alcohol is able to neutralize some of the properties of opium, and particularly its influence on the heart and the skin. Of other remedies often employed in neuroses, one of the most important—strychnine—is somewhat neutralized in its effects by aconite, camphor, and woorara.

The kind of antagonism I have spoken of cannot be considered as due to a chemical neutralization. As regards this last kind of antagonism, it is important to know that the most powerful remedies we can employ against neuroses may be rendered inert by the chemical influence of certain substances which might be employed with these remedies. We are indebted to Dr. A. Garrod for the demonstration that alkalies, and particularly the liquor potassæ, destroy the active principles of belladonna, stramonium, and henbane. Bouchardat has shown that almost all, and perhaps all, the known alkaloids are precipitated by the iodide of potassium combined with iodine.

* Notwithstanding the number of cases of apparent cures of poisoning by opium under a treatment by belladonna, I persist, as does also Bouchardat, in recommending that poisoning by opium be fought against by coffee, by keeping the patient awake by active and passive movements, and by making him walk if this is possible. The experiments of Onsum, of Camus, and my own show that death by opium takes place from the same dose, whether we employ belladonna or not. These experiments clearly establish that the toxic effects of these poisons do not neutralize each other.

6th. *On doses of remedies.*—There are a few remarks which deserve to be made under this head. The first one is that small doses are useless, and allow the nervous affection to take deeper root in the system; and that we ought, therefore, particularly in epilepsy, in tetanus, in neuralgia, in reflex paralysis, in angina pectoris, in whooping-cough, &c., to give as large doses as can safely be borne. The second remark is that, before employing large doses, especially of opium, we must carefully ascertain that the principal glands, and particularly the kidneys, are all right; as if not so, an ordinarily safe dose might be found toxic. And another remark is, that in affections like tetanus, in which there is an antagonism between the complaint and the remedy, at the same time that we must be giving every hour or every half hour a fresh dose of the remedy, we must be carefully watching for the disappearance of the symptoms of the nervous affection, and their replacement by the symptoms of poisoning by the remedy. In a case of which I know the details, Dr. P. G—— succeeded in obtaining the cessation of tetanic symptoms; but, unfortunately, new doses of opium were given after that cessation, and the patient died of poisoning by opium.

XI. *On a few of the most important remedies employed against neuroses.*—It was my intention when beginning this lecture to examine somewhat in detail the therapeutic history of a great many remedies employed in functional nervous affections. Finding now that this would lead me far beyond the ordinary limits of a lecture, I will postpone speaking of the principal remedies until I have to mention their use in treating of the nervous complaints in which they are usually employed. I cannot, however, leave this important subject without saying at least a few words on two remedies which are now, perhaps, the most frequently employed against neuroses.

Bromide of potassium.—This invaluable remedy has been admirably studied by my friend Dr. C. Huette,* who showed how different it is from the iodide of potassium by the properties it possesses as well as by those it does not possess. The principal features of distinction between these remedies are, that the bromide of potassium is useless against syphilis; and that it has a power of inducing sleep, of producing amblyopia and deafness, and of diminishing the sensibility of the fauces, the urethra, the conjunctiva, and sometimes of all parts of the skin—a power which the iodide of potassium does not possess. We owe to Sir Charles Locock the most important discovery of the usefulness of the bromide of potassium against epilepsy. Sir Charles, however, considered this remedy as being useful in those cases where the affection is due to disturbances in the functions of the female genital organs. Dr. C. B. Radcliffe was one of the first who employed the bromide of potassium against all forms of epilepsy; but, following the practice of Sir Charles Locock, he, as well as several other physicians, gave a dose of that remedy which was not large enough. My able colleague Dr. J. S. Ramskill, and myself, after having tried the bromide of potassium in doses of ten or twelve grains three times a day (as Sir Charles Locock used to do), found that the dose ought to be raised to twenty grains or more three times a day; and the beneficial effects of that dose in epilepsy soon became quite manifest. Much larger doses have recently been employed in France, but I doubt if more benefit has been obtained; while, on the other hand, I hear that more than one case of death has taken place which seems to have been caused by the bromide of potassium. I can state that I have never seen any worse effect from a prolonged use of this remedy (for one or two years, with hardly any interruption), at an average dose of three scruples a day, than some sleepiness and dulness of intellect (in a great measure due to the nervous complaint), and a feeling of fatigue.

I have ascertained, as had been done also by several other physicians, that the bromide of potassium, besides its great usefulness in epilepsy, is extremely valuable against nocturnal incontinence of urine, against seminal losses, against dysmenorrhœa, against satyriasis and nymphomania, and several nervous affections coexisting with and increased by a congestion of the base of the brain or of the spinal cord. I have also ascertained that the usefulness of this remedy in epilepsy and in other nervous complaints, particularly when allied with or due to the congestion just spoken of, is notably increased by the addition of a dose of three or four grains of iodide of potassium to each dose of the bromide.

Opium.—The researches of Prof. Claude Bernard on the alkaloids of opium deserve to be placed among the most valuable recent advances of therapeutics. He has shown by more decisive experiments than had been made before—1, that narcein is more soporific than morphine and codein; 2, that these two last alkaloids are able to induce convulsions, but much less than thebaine, papaverine, and narcotine; 3, that the sleep caused by narcein is much more profound than that produced by codein and even by morphine; 4, that the sleep produced by codein is not followed by heaviness, as is the sleep produced by narcein and morphine. Dr. Debout and Prof. Béhier have made, on themselves and on a number of patients, experiments showing the value of narcein as a somniferous agent. They consider it as superior to codein in that respect, but inferior to morphine. It is, however, more advantageous than this last alkaloid in this important particular, that it induces a lighter sleep, more refreshing, and not followed by heaviness or headache, as is often the sleep due to morphine. The dose of narcein is from half a grain to one grain two or three times a day. I have not employed narcein yet; but I can say that codein, inferior as it is to morphine as regards its soporific virtue, is a most valuable hypnotic remedy. It is certainly very much less toxic in man than it seems to be in animals, as I have often given it without any but good effects in doses three, four, or five times as great as the ordinary doses of morphine.

Of the exciting agents contained in opium, there is one which will probably be soon employed in medicine; it is thebaine. This alkaloid, according to Bernard, causes violent convulsions; but it will be found a precious remedy if, as stated by Orfila, Magendie, and quite recently by Dr. Ozanam, it produce tetanic spasms chiefly in the arms.

* Mémoires de la Société de Biologie, p. 19, vol. ii. 1850.

A CRITICAL ANALYSIS
OF THE
MEDICAL EVIDENCE GIVEN BEFORE THE CAPITAL PUNISHMENT COMMISSION.

BY FORBES WINSLOW, M.D., D.C.L.

THE readers of THE LANCET are well acquainted with the fact that in the last session of Parliament the House of Commons appointed a Select Committee, consisting of both branches of the Legislature, to inquire into the expediency of abolishing the punishment of death for capital crimes, and of substituting some other penalty in its stead. This Committee, with the view of arriving at sound conclusions on so important a subject, summoned before them a number of witnesses belonging to different sections of the community, all of whom, it is to be presumed, were considered, in their estimation, qualified to give valuable evidence on the subject under their consideration.

It was not to be supposed that the Commission would consider their inquiry satisfactory and complete without availing themselves of the evidence of some members of note belonging to the medical profession, competent, according to their judgment, to enlighten them in relation to the much-vexed question of the plea of insanity in criminal cases, this being considered by them one of the points bearing on the question at issue. For this purpose, two physicians specially engaged in the practice of lunacy were summoned before the Commission—namely, Drs. Hood and H. Tuke; and it is the evidence of these physicians, just published in the Parliamentary Blue-book, I propose in this analysis critically to examine.

It is most important that the opinions expressed by these medical witnesses should be subjected to a close and rigid analysis; for as the theories which they enunciate, and the data they bring forward to illustrate them, may materially influence the construction of future legislative enactments in relation to the subject of insanity in association with crime, it becomes the more important that some public notice should be taken of their evidence, and its soundness severely tested by reference to well-known and generally admitted facts, and compared with the experience of able and accurate observers of morbid mental phenomena.

The value of such an analysis will be fully appreciated when it is borne in mind that the medical evidence was submitted to a body of gentlemen, distinguished no doubt for their high rank, social position, great knowledge and intelligence, but yet ignorant (necessarily so, except as amateurs) of the very subtle psychological subject which they had undertaken to unravel.*

* The following distinguished noblemen and members of the House of Commons constituted the Commission:—The Duke of Richmond (Chair-

Under these circumstances no blame can attach to such a body of gentlemen for accepting as gospel the *ipse dixit*, however absurd, of medical witnesses of known repute; and neither would it be just to question the mode in which their examination was conducted, or the wisdom displayed in the apparent acquiescence of the Commission in the extraordinary statements made, with a view to their enlightenment, by the two physicians whom they had summoned before them.

The first medical witness examined before the Commission was Dr. Harrington Tuke; and to this physician's evidence I would direct the serious attention of all psychologists, as well as the great body of the profession.

Dr. Tuke, after admitting that he had not "gone into the subject of capital punishment" (the one important point under the consideration of the Committee, and in regard to which he ought to have formed some opinion before presenting himself for examination), was asked to speak more particularly as to the plea of insanity occasionally set up in cases of murder. Dr. Tuke opened the subject by formally protesting against the celebrated dictum of the twelve judges delivered in the House of Lords after the trial and acquittal of M'Naughten for the murder of Mr. Drummond at Charing-cross. Dr. Tuke observed that he considered the definition of legal insanity expressed on that occasion by the judges had led to great error in the administration of the law, inasmuch as the judges made the test of legal responsibility on the part of the criminal to depend altogether on his capacity of "distinguishing between right and wrong." The witness then informed the Committee that he was so forcibly struck with the mischief and injustice likely to ensue from acting upon such a definition of legal responsibility, and knowing (he added with much *naïveté*) that the medical opinion *generally* was decidedly in consonance with his "own," he proposed a resolution, which he submitted last year to the Association of Medical Officers of Asylums, embodying a protest against the legal test of insanity as laid down in the House of Lords by the twelve judges.

Dr. Tuke appears to be unaware of the fact that this legal definition of responsibility in cases of alleged insanity —viz., the capability of distinguishing between right and wrong, has been cited and acted upon by various English judges ever since the days of the illustrious Lords Hale, Coke, Mansfield, and Erskine; therefore it is unfair to blame the twelve judges for having originated this legal test of criminal responsibility. They merely declared what the law of England *was* in regard to this matter, not what it *should be*.

The Lord Advocate then put the following question to the medical witness:—"Do you hold that insanity is a comparative or positive state?" It is, I must admit, somewhat difficult to understand the precise drift of this question; but Dr. Tuke's sagacity at once penetrated its obscurity, for he immediately responded, that "insanity must be a positive fact," and then added the expression of an opinion which I have fully, when referring to the subject of insanity, propounded, "That no insane man should be responsible for his actions to the extent of capital punishment."*

What does Dr. Tuke mean by assuming that insanity must be a "positive fact," and not a "comparative state"? We presume that the Lord Advocate meant by his question to ascertain from the witness whether in insanity there were not *gradations* or *stages* of disordered intelligence, and consequently degrees of mental responsibility. It is clear Dr. Tuke did not perceive the purport of the Lord Advocate's question, and announced as his opinion that "insanity must be a positive fact." Now, if insanity exists at all, it must be a "fact;" but insanity has its various shades and degrees of development, and therefore the Lord Advocate's question as to its being a "comparative state" might properly (with certain explanations) have been answered in the affirmative.

As the examination proceeded, the Lord Advocate said, "Do you think that an insane man should be held responsible to the law for his actions—in fact, for *any offence* (excluding altogether the question of capital punishment)"? To this question Dr. Tuke responds: "It is very much a question of expediency. I think that as a matter of *moral right* he should *not* be responsible [that is, let the reader bear in mind, for '*any* offence' against the law, insanity being set up as an excuse for the act]; but," continues the doctor, "as a matter of 'public expediency,' I think it very important *he should be held responsible to punishment for minor forms of crime.*"

As a "moral right," Dr. Tuke would lead us to infer that it would be monstrous to hold any man legally responsible for the commission of "any offence" if he can be proved to be in the least degree insane; but the matter assumes altogether a different aspect, says the witness, when you view the question of his insanity, legal responsibility and punishment, through the medium of "*public expediency*"!

The witness then again states, without any kind of qualification, that the insane criminal should be held responsible to punishment for "*minor* forms of crime." The strange distinction drawn by Dr. Tuke between "moral right" and "public expediency" is most inexplicable. Surely if a man is to be held excused from capital punishment, and held to be in an irresponsible state of mind, on the ground of his "*moral right*," it would be in the highest degree an iniquitous and inexcusable act of gross injustice to sacrifice his life for the sake of "public expediency."†

Dr. Tuke, after admitting, in reply to questions addressed to him by the Lord Advocate, that insane persons are restrained by the fear of punishment, had put to him the following question: "Have you ever known cases where a lunatic committed a crime believing that he could not be punished because he was insane?" To this interrogatory Dr. Tuke replies, "No, I have never known such a case." The text-books on the subject are replete with the history of insane persons fully conscious of their legal exemption from punishment on the ground of their insanity. Every asylum in the kingdom contains living illustrations of this fact. "Do you think," says the Lord Advocate, "that it is possible?" This is Dr. Tuke's answer: "I think it is a process of reasoning absolutely foreign to a lunatic's estimate of his own state—that it is almost impossible. No man believes himself to be mad, and he would scarcely therefore argue in this way."†

Does Dr. Tuke seriously assert that the insane are always unconscious of their unhappy state? If so, he must have very inaccurately observed their characteristic symptoms. To affirm that "no man believes himself to be mad," is to state that which is directly opposed to the authority and experience of physicians of all countries engaged in the study of insanity and in the care and treatment of the insane. Insanity is a disease the existence of which the patient is occasionally most painfully conscious, and insanity too often complicated with delusions.

It may be argued that the disordered mental impression ceases to be a delusion if the patient is sensible of its presence; but such is not the fact. Within the last few days, I have seen a gentleman whose life is embittered by insane delusions, and delusions influencing his actions; and yet he is aware of their existence, knows that he is deranged, and expresses a great desire to be cured of his mental malady.

Staggered by the extraordinary replies of Dr. Tuke, Lord

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man), Lord Stanley, Stephen Lushington, John Taylor Coleridge, Thomas O'Hagan, Moncrief H. Waddington, J. Wm. Ewart, Gathorne Hardy, George W. Hunt, and Charles Neate.

* When reading this portion of Dr. Tuke's evidence, I felt inclined to shout, as Mr. Dennis, the critic, said, "Stop! that's my thunder." In an article which I wrote in the *Psychological Journal* in 1853, on the trial of Pate for assaulting her Majesty, I distinctly enunciated the opinion that Dr. Tuke apparently puts forward ostentatiously as an original view of his own! The subjoined extract is from the article referred to:—"God forbid that I should stand forward as apologist for those who maintain, even in these enlightened days, that the criminal lunatic should be subject to the extreme penalty of the law! The advocates of such a doctrine will find no mercy at my hands. I question the propriety of even using the word *punishment* in association with the really insane. If it be found necessary, in order to bring them within proper control and discipline, to subject patients afflicted with derangement of mind to certain stringent regulations, it ought only to be considered as a part of a system of rational, humane, and philosophic moral treatment. In every criminal case where the question of responsibility arises in the course of judicial inquiry, if it be possible to establish any degree of positive insanity, it should always be viewed as a valid plea for a considerable mitigation of punishment, and as *prima facie* evidence in favour of the prisoner, and in no case where insanity clearly exists (without regard to its nature and amount) ought the extreme penalty of the law to be inflicted. I feel convinced that the principle just enunciated is the most safe and humane one to act upon; it does not protect the pseudo lunatic from just punishment, and it is conservative in its operation upon society as well as upon those who are really under the influence of diseased mind, and are susceptible of being controlled."

† I should like to hear Mr. Stuart Mill discuss this question.

† Mr. Neate subsequently asked the witness the following question: "Is there not sometimes in the case of lunatics a very keen sense of right and wrong in judging of the actions of others, accompanied by a total want of this sense between right and wrong as to their own actions?" Dr. Tuke replies, "That is not at all unusual." Mr. Neate afterwards asks, "Would the following conversation be consistent with your experience:—Dr. Forbes Winslow said to a lunatic, 'If you were to take a knife and cut my throat, what would it do?' He replied, 'It would kill you.' Dr. Winslow then said, 'What would that be?' The lunatic replied, 'In the eye of the law it would be murder.' Then Dr. Winslow asked him, 'And what would be done to you for it?' The man replied, 'I should have nothing done to me, because I am a lunatic.' Do you consider," says Mr. Neate, "such an answer as that consistent with a state of mind which would require a man to be kept in confinement?" "Certainly," replies Dr. Tuke: "many monomaniacs and very insane persons might have made the same answer." Let the reader contrast this candid and truthful admission with Dr. Tuke's answer to a previous question (2808), "*No man believes himself to be mad.*" How can he reconcile this conflict of opinion? Is it not blowing hot and cold with an important question?

Stanley puts this question to him: "Have not madmen been known to be aware at the time when a paroxysm was coming on?" "Yes," says Dr. Tuke, "and they have begged to be restrained; in my own practice I have met with such." Is this not, on the part of the patient, a consciousness of the presence of at least incipient mental disorder? In other words, is this not a belief in the mind being unsound? If so (and Dr. Tuke in his reply admits the fact), how does he reconcile this statement with the assertion previously made, that "no man believes himself to be mad"?

Mr. Waddington subsequently puts this question to the witness: "Would it be just to punish for the sake of expediency an insane man if he is not 'morally responsible'?"

This is Dr. Tuke's answer, in which he endeavours, in a singular "derangement of epitaphs," to explain his opinions regarding the difference between "moral right" and "public expediency": "No, except it might be extremely useful *that the case should be tried on its merits*, in order to prevent some *future* madmen, who *are* at large, from committing crimes which they can control, which I believe quite possible;" but at the same time he adds, "I should not strain a point against them."

What does Dr. Tuke mean by "some *future* madmen who *are* at large," and the case "tried on its own merits"? Surely that is a common procedure in every court of law? No case can be tried by an English judge except on its own merits. If an attempt were made to try it upon any other merits than its own, it would be scouted with indignation out of court. It *must* be tried on its own merits, and for what purpose? Let Dr. Tuke reply: "In order to prevent other madmen" (whom Dr. Tuke considers to retain the power of control, and to be influenced by the fear of punishment) "from committing similar offences;" but fearing he might be considered disposed to deal harshly with "future madmen" ("at large"), he adds, "I should not strain a point against them;" in other words, I would let them down easily, and, although insane, at liberty, and able to control their actions, I would give them "leg bail" or the "benefit of clergy."

The Committee, apparently not being able to grasp Dr. Tuke's metaphysical distinction between punishment inflicted on the insane for the sake of "public expediency" as antagonistic to "moral right," proceeded to a more practical point of examination, and Lord Stanley asked the following question:—"Have you heard the suggestion made that, in all cases of alleged insanity, it would be better that the trial should go on without reference to the state of the prisoner's mind; and that the question as to his mental state should be an entirely separate one, to be dealt with afterwards by persons conversant with the subject?" To this Dr. Tuke responded: "*Exactly so; that is the way I should propose to do it!*" Mr. Ewart then asks: "Would you have the question of insanity decided before the trial?" "Before or afterwards," replies Dr. Tuke,—

"How happy could I be with either," &c.,—

leaving Mr. Ewart to understand by his reply that he was indifferent which course was taken. The impression the witness, I presume, wished to convey to the Committee was, that the question of the prisoner's insanity should be established at a preliminary judicial proceeding, or made a matter of inquiry subsequently to the verdict of the jury.

Mr. Hardy then asks: "Upon what footing would you, then, try the question of insanity? Would you try it on one particular point which might not affect the crime which the prisoner had committed?—or would you try it as a question of insanity as referring to that particular crime?" To this somewhat complex question Dr. Tuke replies: "I do not know that there would be any objection to the two questions *mixing together!*" "Mixing together!" What meaning are we to attach to this phrase? Dr. Tuke would propose a kind of psychological "half-and-half" solution of the difficulty—a genial and happy combination of the two psychical elements! After previously stating that the question of the crime and the alleged insanity should be separately investigated, he appears to have altered his mind, and recommends to the Committee that the two subtle points should in their consideration, be mixed together!

Mr. Hardy then puts this question to the witness, "Supposing a man under the influence of a delusion were to commit a robbery and murder in the *ordinary* (?) way, would you consider that he was responsible for that act, the robbery and murder being in no way connected with the delusion?" Dr. Tuke says in reply, "that if he were satisfied that the man was really insane on one point, he would give him the benefit of the doubt, and acquit him."

But, adds Mr. Hardy, "If the punishment of death were abolished, would you make any difference in his case, or would you sentence him to penal servitude or whatever might be the substituted punishment?" "Sentencing him" (the prisoner), says Dr. Tuke, "to penal servitude would be of *no* consequence (!), because there (?) he would be discovered to be insane; and I have no doubt that in *every* case the jury would *at once* convict him, knowing that that would be the result. If the punishment of death were abolished, the jury might convict in all cases with *great safety*."

I have been careful to give here the *ipsissima verba* of Dr. Tuke's answer to Mr. Hardy's simple and intelligible question. Upon what ground does Dr. Tuke affirm that a man consigned to penal servitude would, if insane, be soon discovered to be so? And by what process of reasoning does he arrive at the conclusion that a jury would "at once" convict him, knowing that that would be the result—namely, that the prisoner's insanity would, after conviction and being consigned to penal servitude, be easily detected? I fear Dr. Tuke has formed a rather extravagant idea of the sagacity of English juries, and strange notions as to the facility with which the insanity of criminals may be detected.

Continuing his reply to Mr. Hardy's question, the witness adds the following words:—"If the punishment of death were abolished, the jury might convict in all these cases of alleged insanity with *perfect safety*." With "perfect safety," indeed! but, undoubtedly, in many cases with gross and manifest injustice!

Abolish hanging—set aside the gallows—dispense with the benevolent services of Calcraft, and the insane and irresponsible criminal (made so by *physical* disease) may be convicted with "perfect safety," and subjected to any amount of punishment short of actual death which the court pleases to inflict. This is the singular view taken by Dr. Tuke. How far such an opinion is in accordance with the humane and enlightened sentiments of modern psychological physicians having the care of the insane, I will leave the reader to judge.

(To be continued.)

ON A

CASE OF SPASMODIC STRICTURE OF THE ŒSOPHAGUS, TERMINATING FATALLY.

By HENRY POWER, ESQ., F.R.C.S.,
ASSISTANT-SURGEON TO THE WESTMINSTER HOSPITAL, ETC.

As there have been one or two notices of spasmodic stricture of the œsophagus in the columns of THE LANCET lately, perhaps the details of the following case, in which I was much interested some years ago, and in which I regret the treatment adopted by Dr. Brinton did not suggest itself to me, may prove acceptable.

The patient was a gentleman, aged forty-eight, who had been accustomed to lead a very active country life until about twelve months before placing himself under my care in the autumn of 1857. When first seen, he was much emaciated, the skin of the face dark in colour and deeply wrinkled, his tongue coated with a thick fur, and his speech exceedingly hoarse and indistinct, so that it was with great difficulty he made himself understood. When speaking, he was constantly interrupted by a low vibratory cough, giving the impression that the uvula was much relaxed. He complained of pain just above the thyroid cartilage; and, on the following day, believing that I felt obscure fluctuation, I made an opening with a lancet, and let out about a drachm of well-formed pus. A few days afterwards, as the cough was still troublesome, and it appeared to be excited by the uvula, which was swollen and elongated, this was at his own suggestion removed. He now told me that he had been under the care of many medical practitioners for his cough, and that he whom he had last consulted had freely employed a solution of nitrate of silver. The patient acknowledged that he was of a nervous temperament. He slept well, and had a good appetite; but his bowels were confined. He further stated that he had great difficulty in swallowing solid food, and still greater in swallowing liquids, owing to their producing a violent explosive cough, and that he had been accustomed for some time past to live on potted meats and puddings.

Not having seen any similar case before, and being struck with the huskiness of the voice, the abscess over the larynx, some present fetor of the breath, the violent cough, accompanied by expectoration, and influenced no doubt by the treatment adopted by others, I considered the case to be one of chronic laryngitis, with, perhaps, some disease of the cartilages of the larynx or of the hyoid bone, and, in the first instance, wholly overlooked the dysphagia, which was undoubtedly present from the commencement. He was ordered a succession of blisters to the throat, and directed to take cod-liver oil.

After a few days, however, in consequence of his frequently referring to the difficulty of deglutition, and from the circumstances that he was perfectly easy at all other times, that he slept well, that there was no dyspnœa, no harshness nor roughness of the breathing, and that the coughing only came on when he attempted to swallow, the idea arose in my mind that it was possibly not a case of laryngitis at all, but one of stricture of the œsophagus, and that it was the passage of the food into the larynx that really occasioned the cough and other distressing symptoms. On attempting to introduce a bougie down the œsophagus, my opinion was confirmed. He then told me that he had always had some difficulty in swallowing, never, for instance, having been able to finish a glass of wine at a draught; also that one of his sisters was in a similar state. I placed a glass of wine before him, and bade him drink it. He took about a teaspoonful at a time, and allowed it slowly to trickle down the œsophagus without performing the movements of deglutition, but he did not cough. He would not or could not manage to take the cod-liver oil.

At this time he proposed a consultation with Dr. Meryon, and we together endeavoured, though unsuccessfully, to introduce several different-sized bougies. Dr. Meryon suggested that they should be daily employed. He was ordered a calomel and opium pill twice a day. After various ineffectual attempts on my part to pass the bougie, he saw Sir William Fergusson, who, using more force than I had dared to employ, passed an œsophagus bougie of about one-third of an inch in diameter through the stricture, and directed the same proceeding to be daily adopted. I found that this was easily accomplished if the muscles of the pharynx were taken by surprise, and the instrument rapidly and cleanly passed; but that if there was a momentary delay its introduction became almost impossible. He was much troubled with the saliva, and a quantity of thick, tenacious mucus accumulating in the pharynx, and ultimately exciting and being ejected by cough, which became very distressing to himself and others. He was ordered iodide of potassium, and blisters to the throat, with various other remedies, in the hope of removing or alleviating the symptoms arising from the collection of mucus and saliva, without effect. He grew thinner and hoarser.

I lost sight of him for more than a month, when he again called me in, and was apparently unchanged, except that he looked more haggard and cachectic. He had been to see Mr. Erichsen, who had recommended the application of nitrate of silver to the throat. This he had tried without benefit. His appetite had quite failed during the last day or two.

Early in February, five months after I had first seen him, Mr. Paget was consulted, who, believing that some malignant growth might be present in the œsophagus, recommended the discontinuance of the bougie, general measures of support, and that orange-juice should be sipped to relieve the secretion of saliva. At a second consultation an effort was made, without success, to introduce a large catheter, in order that some soup might be injected into the stomach. The orange-juice greatly diminished the secretion of saliva, and relieved the patient from the constant and exhausting efforts to hawk up the mucus. At this period he declined to have œsophagotomy performed. His strength now rapidly diminished, in spite of enemata of broths of various kinds. He wrote everything, his articulation being unintelligible. He suffered from extraordinary alternations of heat and cold: now insisting on having the windows and doors thrown open, and his hands in cold water; now muffling himself up in blankets, and having warm-water bottles to his feet and stomach. His breathing was perfectly free from rhonchus or other abnormal sound, he was quite free from pain, his intellect was singularly clear, and his muscular power considerable, to the very last. He had been very restless, and, lest he should fall from the bed, he had been placed on a mattress on the floor. A few moments before he died, he wrote, "I am better; do not bury me."

Permission for a post-mortem examination was accorded, at which Mr. Paget was present. The result may be summed up in the statement that there was absolutely no disease discoverable in the larynx, pharynx, root of tongue, pneumogastric nerves, nor in any other organ. We were constrained to regard it as a case of spasmodic stricture of the œsophagus.

It is a matter of regret with me that I did not press the performance of œsophagotomy more strongly in this case, and that the employment of nutritious enemata was not resorted to at an earlier period. It would have been a very interesting case upon which to try the treatment proposed by Dr. Brinton. At the same time, I scarcely think he was a gouty man. His parents were very healthy people, and he himself had been an excellent runner, cricketer, and sportsman, and withal a very abstemious man, up to the time that his symptoms began to appear. Nevertheless, he certainly had for many years suffered from dyspepsia, which is quite in accordance with Dr. Brinton's view, and which, I regret to add, I then regarded as a consequence, and not as a cause, of his disease.

Upper Seymour-street, March, 1866.

CASE OF OVARIAN TUMOUR;

RECOVERY AFTER UNSUCCESSFUL OVARIOTOMY.

BY JAMES WILLIAMSON, M.D.

On the 30th December, 1862, I was called to see Mrs. C——, aged thirty-three, married several years, and the mother of three children, the last having been born about twenty months ago, and which she suckled six months, when the child died. Has been conscious for more than a year of the existence of a tumour in the lower part of the abdomen on the left side. Saw Mr. Bristowe, of Camberwell, about six months ago, who examined her. His opinion was that she was not pregnant, but that the swelling was due to some intra-uterine growth. When I saw her she was suffering from menorrhagia, the result, it was supposed, of impending abortion. On examination externally, a soft tumour could be felt in the left iliac fossa, extending nearly to the umbilicus. Per vaginam, I found the os uteri slightly patulous, as well as pressed to the right side; while a tense angular projection, suggestive not a little of a knee or elbow, was felt in the pelvis, between the uterus and promontory. Being doubtful as to the nature of the swelling, I advised her to see Dr. Barnes, who examined her with me next day, Dec. 31st.

The following is a copy of the cursory notes taken by Dr. Barnes upon that occasion:—"The os uteri is partially open; it lies behind the symphysis pubis, against which it is pressed by a tumour behind it and to the left of the uterus, and occupying generally the brim of the pelvis, and dipping down into the cavity. The body of the uterus is somewhat enlarged; it is very plainly felt above the symphysis pubis by the hand outside; the fundus is pointed to the right, lying over the right groin, the uterus being pressed into an oblique direction by the tumour. An angular, hard projection, giving the impression of a knee or elbow, was felt in the pelvis between the uterus and promontory. No further information was gained by the finger in the rectum. The rest of the tumour was felt rounded and somewhat elastic. Externally, the tumour was irregular in form, reached nearly to the umbilicus, and spread across the abdomen, occupying partly the left iliac fossa. It presented two angular projections, giving the idea of fœtal limbs. There was no tenderness; there had been no symptom of peritonitis or prostration."

Dr. Barnes saw her again with me in consultation on Nov. 19th, 1863, up to which time she had preserved excellent health and spirits, and was getting about. Is calculated now to be from three and a half to four months pregnant; there has been no menstruation for four months. Has suffered on standing &c. from prolapsus uteri; has worn a perineal pad without much benefit, but is now to have an abdominal belt. I give *verbatim* the result of Dr. Barnes's second examination:—"Is now as large as in ordinary pregnancy at six months. The enlargement is across the abdomen, as in twins, but more marked. The extra-uterine tumour is directed to the left, uterus to the right; there being a depression at upper part between. At upper part of left tumour is an angular projection, suggesting a fœtal knee or elbow. Both tumours rise above the level of umbilicus. Per vaginam, cervix uteri pushed to right; os widely open, soft, admitting finger freely;

body of uterus pushed over to right. Brim of pelvis, especially on left of cervix uteri, occupied by an even, resisting body—the lower end of extra-uterine sac. This occupies at least three-fourths of brim, leaving only a quarter for uterus."

In view of the contracted space at the brim, Dr. Barnes and I agreed to bring on labour at about six months, when, it was hoped, a small, compressible fœtus might pass without much difficulty or risk of violence to the extra-uterine tumour; and also that involution of uterus smaller than at term would entail less local mechanical injury, as well as less general disturbance of the system.

To obtain still further advice in her case, Mrs. C—— was now induced to consult Dr. Robert Lee, who examined her on Jan. 14th, 1864, and diagnosed ovarian cyst, but was doubtful of pregnancy. He again saw her with me on Feb. 3rd, was now convinced of the pregnancy, and recommended her to go on to the sixth or seventh month, when premature labour should be induced. About the sixth and a half month of utero-gestation sickness set in so severely that she could retain nothing on her stomach; and the swelling increased so much, and the inconvenience therefrom was so great, that labour had to be brought on. Accordingly Dr. Lee passed up the stilette-catheter into the uterus and punctured the membranes, and on March 10th a small female child was born, which survived but twelve hours. The mother made a tolerably fair recovery, and our attention was now exclusively directed to the tumour, which had been little affected by the labour, but continued slowly and gradually to increase.

On April 6th Dr. Lee again saw Mrs. C——, and advised tapping, which I at once did, and drew off fourteen pints of clear fluid. We now discovered that the cyst was multilocular; that we had emptied the parent cyst, while two smaller ones remained still full, and adherent to the parietes of the abdomen on the left side. As Dr. Lee would not entertain any proposal of relieving her by ovariotomy, I recommended Mr. Bryant and Dr. Oldham to be called in. They looked upon it as a case, though not the most favourable for ovariotomy, yet holding out considerable prospects of success, provided the general health and strength could be somewhat improved. To this end she was sent to Brighton for about a month, from which place she returned rather stronger. The operation, however, was delayed for several weeks, to ascertain if she gained in strength after getting home. But remaining stationary in this respect, the day for operating (June 18th) was now fixed. A day or two, however, before this, Mrs. C—— complained of "something giving way in her stomach." This was followed by considerable abdominal pain, fever, sickness, and general constitutional disturbance. The idea of operating was in consequence for the present entirely abandoned, Mr. Bryant believing that it would not only be impossible to remove the cyst, but that the peritonitis which then existed and the feeble powers of the patient forbade the attempt. Dr. Oldham saw her also a few days subsequently, and confirmed this opinion.

On June 30th, Mr. Bryant, hoping to relieve the system somewhat, tapped the patient, and withdrew a few pints of a sero-purulent, gelatinous fluid. For several weeks after this she continued to fluctuate; the pulse varying from 100 to 130, with occasional sickness as well as abdominal tenderness. Under existing circumstances, both Dr. Oldham and Mr. Bryant still regarded the operation as unjustifiable. Not quite realising the situation of matters, and becoming impatient of delay, and being urged on by their friends, Mr. and Mrs. C—— now asked Dr. Tyler Smith to see the case. He examined her on the 23rd of July, and on the 25th he too tapped the cyst, and removed about five pints of sero-purulent matter; giving it as his opinion that it was a case holding out considerable prospects of success from operation, although by no means the most favourable for that purpose. He was in hopes that the removal of all this matter would considerably unload the system, and allow her to regain her strength somewhat ere it refilled, when he purposed performing ovariotomy.

The cyst gradually filled again, but there was little improvement in her strength. The pulse now ranged from 80 to 100; there was no sickness, nor tenderness of the abdomen; and, being pressed by the patient and her friends, Dr. Tyler Smith, although rather doubtful of the result, operated.

On making an incision the cyst was found so completely adherent to the parietes of the abdomen that it was impossible to get behind it at any one point. The fluid portion was therefore drawn off, the septa broken down, and the wound closed up. The patient experienced no unfavourable symptoms during the healing of the wound; considerable portions of the cyst or its adhesions sloughing and being removed by the forceps during the process. At the end of a month the wound had nearly healed, and she was conveyed to Hastings, where for a time she gained somewhat in flesh and strength. About a week after her arrival there œdema of the legs set in, and she gradually became completely anasarcous, which condition was accompanied with extreme dyspnœa. After remaining at Hastings in this state for about three weeks she returned home.

When I saw her she was, as already stated, quite anasarcous; there was very great dyspnœa, little or no appetite, pulse 100 to 120, and the urine highly albuminous. A small opening existed at the lower part of the cicatrix, through which exuded on pressure a considerable quantity of purulent matter. On the left side of the abdomen, and occupying the situation of the original cyst, there could be felt a hard ridge, extending from about the middle of the cicatrix nearly to the anterior superior spine of the ilium.

Mrs. C—— continued for some time in much the same state; pulse 80 to 100, restless nights, great dyspnœa, no appetite, sickness extreme and but little relieved by counter-irritation or any form of medicine, so much so that she had to be supported by beef-tea enemata. There was at the same time anasarca over the whole body, with a free and copious discharge of purulent matter through the opening in the cicatrix. At length this opening closed, the abdomen rapidly enlarged and became extremely tender, while the pulse rose to 130. This aggravation set in about the second week of January, 1865. On the fourth day from the commencement of these last-named symptoms a slough formed at the upper part of the cicatrix, burst, and discharged about five pints of sero-purulent matter, which continued to flow freely for several days. All the unfavourable symptoms now disappeared; the pulse fell to 80, the sickness abated, the dyspnœa and anasarca subsided, the tongue became clean, and the urine free from albumen. A second slough now formed at the *lower* part of the cicatrix, from which a profuse purulent discharge took place. Through both these apertures, each of which was about the size of a half-crown, folds of intestine could be seen covered with adhesions. These adhesions gradually cleared away, and at the same time the abdomen slowly diminished in size. It is a very notable fact that through the above-mentioned openings a considerable quantity of matter was pressed up *from amongst the intestines* several times a day. Moreover, during the sloughing process, extending over a period of about three months, the stomach was so irritable that for weeks together her chief support were enemata of beef-tea, and arrowroot with brandy; being able to retain nothing by the mouth but a very small quantity of milk with lime-water, and occasionally a little brandy-and-water. As this is an important practical point, I may cite another case, which occurred about the same time—one of carcinoma of the stomach,—in which the patient was absolutely unable to take anything, not even water, and was kept alive for two months by injections of beef-tea and arrowroot with brandy.

The history of this remarkable case is now one of steady recovery.

March 22nd.—Three days ago Mrs. C—— complained of considerable pain. This morning a slough formed in the only portion of the original cicatrix which had not already re-opened, and a profuse discharge of fetid matter ensued.

April 7th.—Patient has suffered for some days from pain on the left side of cicatrix; slough also formed there and discharged, affording her signal relief.

She now made very marked progress. There was but a slight discharge from the wound, which had almost completely cicatrized; she gained rapidly in flesh and strength, and was able to drive out twice a day for an airing.

June 9th.—Is now so well that she can walk about a mile with comfort. Still a little discharge, which diminishes daily. A hard swelling, about the size of a small orange, can still be felt under the cicatrix, adherent to it, but apparently free otherwise. This, too, gradually decreases in size.

25th.—Patient continues to improve in health, and is now able to attend to her domestic duties. The swelling is a good deal less, and the discharge not above half a teaspoonful daily, and appears to proceed from a small sinus in the cicatrix.

July 22nd.—Much stronger, and walks out two or three times a day regularly. Still a very slight discharge. Has menstruated for the first time for the last two years.

Aug. 2nd.—Went to Yarmouth, and on the 10th writes that she gets on exceedingly well, and feels much improved. Bathes every day. Discharge has now entirely stopped.

I have been induced to publish the above case as it presents to the profession several points of interest and instruction. Of

these the chief would appear to be, the paramount importance and efficacy, in a disease of this nature, of good nursing in the patient's own home, of generous diet, and particularly of pure air. Ovariotomy, however skilfully performed, proves fatal, I fear, in so many cases, even when most favourable for operation, principally from the reverse of those conditions. The fact, too, that purulent matter freely mixed with the intestines, and welled up day by day through the abdominal opening, rather militates against our preconceived ideas on this point. The case in question is at the same time all the more encouraging that it has terminated so successfully while possessing many unfavourable features. Above all, the long and obstinate sickness that marked its course teaches us to persevere under circumstances the most discouraging; the enemata of beef-tea &c. sustaining for so long a time the feeble powers of the patient, till the reparative process was so far completed that nature herself could unassisted reassert her sway. At this date (Feb. 1866) the patient is perfectly well.

Clarendon Villas, Mildmay-park, N., February, 1866.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

CASE OF POISONING BY ESSENTIAL OIL OF BITTER ALMONDS; DEATH; AUTOPSY.

(Under the care of Dr. BARCLAY.)

A FEW years ago accidental or suicidal deaths from swallowing the above liquid were very much more common than they have been of late. It is probable that this may be partly explained by the fact that a preparation of the oil deprived of prussic acid, and consequently innocuous, has come into common use. Some interesting experiments by Dr. Price Jones, illustrating the different effects of the two liquids, are to be found in THE LANCET for Jan. 10th, 1857, p. 45.

In the following case there would seem to be no doubt that the preparation employed was the essential oil, which, Dr. Taylor tells us, is four times as strong as the Pharmacopœial prussic acid. Dr. Reginald Thompson has supplied us with the following notes of the case:—

On the 3rd January a man was brought into St. George's Hospital with the symptoms of poisoning by oil of bitter almonds. He was a barber, aged fifty-seven, and had taken (it was believed purposely) two drachms of the oil, which was used in the trade for scenting pomatum. The oil was taken at twenty minutes past ten A.M., one hour after breakfast. Warm water and tartar emetic were at once administered by those in the house, without, however vomiting been induced. He was brought into the surgery at twenty minutes to eleven. He was then speechless. The smell of the oil was very perceptible in his breath; no pulse could be felt at the wrist; the breathing was hurried; the pupils were dilated; the extremities cold and clammy, and there was a general purple hue on the face and other parts of the body; the tongue was furred; the fauces and uvula œdematous and congested. At a quarter to eleven, half an ounce of carbonate of magnesia was administered, followed by a draught containing the perchloride of iron and sulphuric ether, of each one drachm. At five minutes to eleven the stomach-pump was introduced, and the contents of the stomach well washed out. The smell of almond oil was very strong, pervading the room and the passage. There was not much food in the stomach. A very marked rally followed this operation. The pulse returned to the wrist, and beat with fair strength, 88 in the minute; the pupils became smaller, and the extremities warmer, and he recovered sufficiently to move and put himself to rights. He was then carried up stairs, and was put to bed. He was apparently doing well, when at half-past eleven he was seized with sudden vomiting; the face became purple and full, the breathing laboured, and a fit was evidently coming on. The pulse was beating 118 in the minute; the pupils became small, the jaws closed, and he became quite insensible; the breathing became spasmodic, and the motions were passed involuntarily; respirations 20, and the pulse fell to 76. There was blowing action of the right buccinator, and diminished sensibility of the right eye. Heart's sounds were healthy. At forty minutes past eleven, cold douche was freely applied to the nape and spine, and the face slapped with a wet towel, which temporarily roused him. Two ounces of brandy and some beef-tea were injected into the rectum, but were returned immediately. At half-past twelve the heart was still beating; he was quite insensible, pale and blue. Temperature in the axilla 91·6°; pulse 68; respirations 12. The pulse became gradually weaker; and though galvanism was applied vigorously and steadily, no effect was produced, and he died at twenty minutes past one, the lungs acting once or twice after the heart had ceased to beat.

The examination of the body was made by Dr. Dickinson, and the following is a copy of his notes:—The body was examined twenty-four hours and a half after death. It was in good condition, the rigor mortis being well marked. On cutting into the scalp, a quantity of dark fluid blood ran out, the bones of the skull were discoloured, and a good deal of fluid blood ran out of the cerebral vessels when the brain was sliced. The ventricles were nearly empty and natural. There was a decided smell about the brain, which was suggestive of prussic acid, but was less distinctly recognised than what was emitted by the stomach. A very little old tubercle, scarcely visible, was found at the apex of each lung. Both were congested behind and full of frothy fluid. There was a little atheroma of the aorta, and some thickening of the mitral valve. The left ventricle was quite closely contracted; the right was uncontracted, and contained decolorized coagulum. The stomach contained a good deal of blood-tinged mucus. The mucous membrane of the great curvature was congested, and of a bright pink colour. There was a decided smell of bitter almonds in it. The intestines were natural externally. The kidneys, liver, and all the other abdominal viscera were examined and found natural. The fauces were œdematous. There was simple effusion of serum under the mucous membrane in the fauces and upper part of the larynx. Excepting the clot mentioned in the heart, the blood was fluid.

GUY'S HOSPITAL.

A CASE OF POISONING BY ACCUMULATION OF VOLATILE HYDROCARBONS IN A DISUSED TAR-BOILER; RECOVERY.

(Under the care of Dr. GULL.)

OUR attention was directed to the following case by Dr. Alfred Taylor, who remarked that the noxious agents seemed to have been benzole and other volatile hydrocarbons, the products of distillation of coal-tar. This was on the day following the accident, and we found the man nearly recovered. He told us that he had no recollection of anything which occurred after his descent into the boiler until he found himself in bed next morning.

The following notes are derived from the case-book of Mr. Nowell, clinical clerk:—

T. L——, aged forty-two, labourer, admitted Feb. 20th, 1866. Employed at a gas-tar distillery, where pitch is made. One of the large boilers or stills, which are eight feet deep, and connected to one another by short pipes, capable of being opened or shut off by taps, was undergoing repair, and had been empty for more than a week. The engineer had been down on the 16th ult., without suffering any inconvenience from the gases generated in the adjoining still, and had gone down again on this day at eight A.M. to repair the damage. Whilst thus engaged he called out, and the present patient going to see what was wanted observed him reclining on his arm, like one dead or asleep. Whilst going down a ladder to his assistance, he in his turn suddenly called out for someone to steady the ladder, and would have fallen but for help. He was dragged out insensible, and continued so for more than an hour. Then he became quite ungovernable, and endeavoured to bite and strike anyone who came within his reach, requiring

three or four men to hold him. He made a great outcry, and, from the description given, would appear to have resembled a person affected with epileptic mania.

Three hours afterwards he was admitted into the hospital, and the following note was then taken of his condition:—"He will lie quite still if not disturbed; but when moved or touched cries out, and requires to be restrained. He is not conscious of surrounding objects; his pupils are dilated; common sensation is not impaired. The breath is rather cool; skin moist, and perspiring freely; legs and feet cool; shivers now and again. Respirations easy, not stertorous, 20 to the minute; pulse 80, regular, very weak."

Half an hour afterwards he could swallow fluids freely; his eyelids were firmly closed, and sensibility to cold is noted as being increased. "He endeavours to wrap the clothes more closely around him. He will not answer when spoken to." Pulse 64; respirations 20, quiet.

In an hour's time he was conscious of surrounding objects, looking wild and astonished; could talk distinctly and rationally. Pulse 72, rather fuller; respirations 24; skin moist. His urine contained a trace of sugar.

ST. MARY'S HOSPITAL.

RUPTURE OF THE ILEUM AT THE SEAT OF AN ULCER; PERITONITIS; DEATH.

(Under the care of Mr. LANE.)

PERFORATION of the intestines, as a result of ulceration due to typhoid, tuberculosis, biliary calculi, or foreign bodies, is not an uncommon occurrence. The existence, however, of a single small ulcer in some part of the small intestine which, with or without external violence, gives way and causes death by peritonitis, is comparatively rare. In a medico-legal point of view, such cases are always interesting. Pathologically, they are very difficult to explain.

The following case bears a striking similarity to one which fell under our notice a few weeks since in the St. James's Parish Infirmary, under the care of Mr. French. A "casual" was admitted to the reception ward one evening in apparently good health. In the night he complained of pain in the belly, which was relieved for a time by fomentation, then recurred; symptoms of peritonitis ensued, and he died in two days. His death became the subject of an inquest.

On post-mortem examination, it was found that a small ulcer in the ileum had given way, and the contents of the bowel had consequently escaped into the peritoneal cavity, with the ordinary result. In that case there was no evidence or allegation of violence; but the man stated that he felt as if "something had given way in his inside." In the present instance it is probable that the powerful contraction of the abdominal muscles, necessitated by the carrying of a heavy weight had an important influence in bringing about the rupture at that particular time.*

It is curious to reflect upon the probability that the lives of apparently healthy persons not unfrequently hang upon a very thin thread. An ulcer in the stomach or bowels may have nearly pierced the coats; some local inflammation, set up in consequence, may be gumming up the part, so as, if undisturbed, to repair the weak spot, when a sudden strain, an unusually full meal, a "brisk purge," or some such violence, will tear the part asunder, and hurry the patient to death. A case which occurred in our own practice some years since was a good illustration of this. A young girl, supposed to be healthy, but really affected with ulcer of the stomach, consumed a couple of buns. An hour afterwards she was attacked with abdominal pain, and death speedily occurred from peritonitis. On post-mortem examination, we found the stomach enormously distended with pieces of bun swollen up like sponges, and an ulcer in its coats which had given way. It was probable certainly in that case that perforation would sooner or later have taken place; but it was difficult to doubt that the buns were the proximate cause of her death.

It is a good general rule, there can be no doubt, in any case of peritonitis occurring suddenly in a fairly healthy person, to avoid interference with the stomach and bowels by purgatives, or other means likely to excite their action. At least we shall thus avoid destroying, in some instances of perforation, the barrier which is being set up against the escape of their contents into the peritoneal cavity. The case before us was, as will be seen, a complicated one, from the existence of an inguinal hernia. The presence of this, although it was apparently reducible, sufficed to render the application of an enema a proper precautionary measure.

We are indebted to Mr. Roche Lynch, house-surgeon, for the following notes.

W. A——, aged thirty-four, married, labourer, admitted Jan. 31st, 1866. He states that while carrying a sack of coals he felt something give way in his abdomen.

On admission, he was very pale, with an anxious expression of countenance, unable to stand up, and complaining of great pain in the belly; pulse soft, though quick. Had an inguinal hernia on the right side, of old standing, which, however, was readily reducible.

Feb. 1st.—Was very dull, not readily answering questions; pulse slightly wiry and quick; complains of pain in the lower part of the abdomen, which was slightly tympanitic, and his legs were drawn up; no sickness. Ordered an enema, and ten leeches to be applied to the abdomen.

2nd.—Much weaker; has passed neither fæces nor gas; abdomen tympanitic; much pain; pulse smaller and very quick (about 130). Ordered brandy, and calomel and opium every four hours.

He continued in this state, getting weaker, and much annoyed by vomiting, which occurred now for the first time, and was constant till shortly before his death. The surface became cold and covered with clammy sweat, the eyes fixed and glassy, and he died in the evening about nine o'clock.

Autopsy, thirty-six hours after death.—There was a large quantity of yellow fluid, mixed with flaky matter, of a pea-soup character, in the cavity of the peritoneum. The intestines were matted together by recent lymph, and on searching further a small rent was discovered in the ileum, about six inches above its junction with the large intestine. On removing this portion of gut, and slitting it open, there was a small ulcer about the size of a sixpence completely torn across its centre in a ragged manner, while on the free edges of the tear was some recent lymph. The rest of the intestines were now thoroughly examined, but no other ulcer or trace of disease was anywhere to be found. The hernia proved to be omental, perfectly free from strangulation, and the contents of the sac were free from inflammation.

MIDDLESEX HOSPITAL.

EMPLOYMENT OF DRAINAGE-TUBES.

(Under the care of Mr. NUNN.)

WE understood Mr. Nunn to say, with regard to the first of the following two cases, that he believed the alternate injection of the antiseptics named materially added to the utility of the drainage-tubes. In the second instance, as will be seen, the employment of these means was not attended with the same amount of success, and a very free opening was required to be made before the condition of the parts improved. Both cases are interesting in a medico-legal point of view. We can understand the first especially giving rise to much difference of opinion in a court of law, supposing that the question of liability of the railway company had been brought to trial.

CASE 1. *Abscess of the side—following injury in railway accident (?).*—J. S——, aged forty-six, clerk in a large shop, was in a railway carriage in May, 1865, when a collision took place. He was apparently only injured on the forehead by a blow which rendered him insensible for a short time, and was obliged to leave his duty only for a few days. In November he was seized with severe stabbing pain in the left side, with feverish symptoms, and was treated for pleurisy. A swelling, however, formed over the angles of the lower ribs of the left side. This, being an abscess, was punctured by his medical attendant (Dr. Hooper, of Old Kent-road); but as it showed no tendency to improve, and the patient's strength was much impaired, that gentleman advised his entrance into an hospital.

Accordingly, on Dec. 19th he was admitted into Middlesex Hospital. At this date no evidence existed of connexion between the abscess and the pleural cavity. The discharge was excessive, and often offensive. As the suppuration showed no inclination to subside under constitutional treatment, a drainage-tube was passed through the abscess, which, by the way, had a diameter of about six inches. Injections of solu-

* A case of perforation of the ileum, in which two apertures were found, is quoted in Casper's "Wochenschrift," 1864.

tions of chloride of zinc and of permanganate of potash were alternately thrown into the cavity of the abscess through the drainage-tube, with the effect of improving the character of the discharge at first, and finally of arresting its purulency. The tube was then withdrawn, and obliteration of the abscess followed. The patient was discharged well.

CASE 2.—W. S——, aged forty-two, a baker, was admitted on the 19th of September, 1865, with a large fluctuating tumour of the left buttock, which he reported to have existed for six weeks.

Sept. 25th.—Four ounces of pus were evacuated, and a drainage-tube was run through the cavity of the abscess, which was apparently under the gluteus maximus. The patient was in a very exhausted condition from sleeplessness and suffering, and could only lie in a prone position. The drainage-tube was continued in its place until the 31st of October, when it was withdrawn, no substantial improvement having taken place, notwithstanding the use of the injections of solution of chloride of zinc and of permanganate of potash, as in the preceding case, through the tube.

Nov. 10th.—Mr. Nunn made an incision parallel with the posterior border of the trochanter major, exactly as for the operation of excision of the head of the femur, with the purpose of exploring the abscess. No articular disease being discovered, the cavity of the abscess, which extended under the gluteus maximus as far as the great sciatic notch, was, according to Mr. De Morgan's method, thoroughly sponged out with a strong solution of chloride of zinc (forty grains of the chloride to the ounce of water), and the cavity was, until the 21st of December, daily injected with solution of the same strength. On the 24th the patient was ordered to endeavour to move about with crutches; and he was discharged well on the 30th of January, 1866.

In this case the drainage-tube was insufficient to carry off the products of so large an abscess. The strong solution of chloride of zinc, combined with the free exit of the pus provided by the incision, proved effectual in bringing about a cure.

The history of the case is important considered in conjunction with Case 1, as showing what may eventually result from mechanical injury of a violent character, although the immediate effects may seem to have passed away. It appears that this patient, in March, 1865, received a blow from a skittle-ball, the weight of which ball he stated to be 28 lbs. This blow was from the ball in mid-flight, the ball having been thrown at the patient in drunken frolic. He was knocked over, and so put *hors de combat* that he was taken home in a cab; but, nevertheless, was able to resume his work after the expiration of three weeks. In July he began to feel pains in the limb, which were supposed to be of the nature of sciatica. These pains ultimately became more localized about the hip; and by September, the date of admission into the hospital, were attended by the swelling of the buttock as described. Thus three months after apparent recovery from the immediate effects of the blow, an abscess, which threatened the patient's life, formed, the origin of which can scarcely be questioned. In Case 1 the railway accident occurred in May; abscess followed in November. In Case 2 the blow of the skittle-ball was received in March, and the abscess followed in September. Had the railway accident any share in the causation of the abscess of the side in Case 1? The patient received a blow which left an obvious trace in the form of a cut on the forehead, and he was rendered insensible. Is it not likely that he may at the same time have received a second injury in the part where the abscess showed itself, or, while insensible, have been subjected to a second shock? The railway company gave a liberal compensation for the cut on the forehead, and further claim is doubtless thereby barred; but, in these days of actions for damages, such cases are worthy of being borne in mind.

UNIVERSITY COLLEGE HOSPITAL.

LARGE ACEPHALOCYST AT THE BACK OF THE NECK; SUCCESSFUL REMOVAL.

(Under the care of Mr. ERICHSEN.)

IN a recent visit to this hospital, we remarked a lad of eighteen years, with a crucial incision at the back of his neck, which had nearly healed. The appearance and situation of the wound were just such as occur where a large carbuncle has been successfully treated by incision. We learned, however, the following particulars of his case:—

The patient, a farm labourer, had noticed a slowly increasing swelling at the back of his neck for the last five years. A short time since he applied to a surgeon in the country, who cut down upon it; but, finding the disease deeply situated, had desisted from further attempts to relieve the patient. Some inflammation and suppuration occurred in the wound, and the lad came up to town.

On Jan. 24th, Mr. Erichsen made a crucial incision over the part, and removed entire a large hydatid tumour, which was situated under the trapezius and amongst the deep muscular structures lying between the occipital bone and the spines of the cervical vertebræ.

The tumour, when examined, was found (so Mr. Nunneley, house-surgeon, informed us) to consist of a simple acephalocyst, containing no echinococci. The patient said he had suffered no pain in the part, but a good deal of inconvenience from the swelling, which was about the size of a couple of fists.

The very unusual situation of the parasite renders the case worthy of being noted. Acephalocysts rarely occur in the muscular system, which, on the other hand, is the most common seat of the cysticercus cellulosæ.

GREAT NORTHERN HOSPITAL.

COMPOUND COMMINUTED FRACTURE OF THE BONES OF THE LEG; DELIRIUM TREMENS; DEATH.

(Under the care of Mr. W. ADAMS.)

THE following notes were supplied to us by Mr. W. H. Ellis, house-surgeon:—

E. G——, aged thirty-nine, milkman, was admitted on January 8th, at eleven P.M., in consequence of an injury sustained from a can of milk falling on his left leg. On admission he was found to have sustained a compound fracture of the tibia at about the junction of the middle with the lower third of that bone, with protrusion of the upper fragment. It was found necessary to saw off about half an inch of the projecting portion in order to effect reduction, after which the limb was put up in the ordinary swing apparatus. About nine A.M. on the 9th arterial bleeding supervened, and continued till seven in the evening, all the ordinary means for its arrest—ice-bags, &c.—being unavailing, though it was partly controlled by the tourniquet applied to the femoral artery. He was placed on full diet, with liberal supplies of beer, wine, and beef-tea; and seemed to be progressing favourably till about half-past four P.M. on the 10th, when he became restless and delirious, getting worse and worse, until his condition was one of confirmed delirium tremens, from which he sank exhausted about twelve P.M. on the 11th. He was treated with liberal supplies of alcoholic stimulant, and half a grain of morphia was injected subcutaneously every two hours. Latterly also thirty minims of Battley's solution of opium were administered every hour. In spite of this treatment, the utmost period of sleep obtained was about ten minutes.

Autopsy, twenty-four hours after death.—The internal organs were all healthy (only congested, as would be expected), except the liver, which was much enlarged and indurated. A dissection of the injured limb being made, it was found that, in addition to the fracture of the tibia, the fibula was much comminuted, being broken into ten or twelve portions. It was denuded of periosteum, as was also the tibia for an inch above and below the seat of injury. The comminution of the fibula extended from about half an inch below the superior tibio-fibular articulation to about the junction of the middle with the lower third of the bone, and just where the anterior tibial vessels passed through the interosseous membrane a sharp portion of the fibula was found transfixing them. The sheath of the posterior tibial nerve was filled with pus, and all the superficial and deep muscles of the back of the leg were in a state of degeneration and impregnated with dark fluid blood; yet the foot throughout maintained its vitality.

TESTIMONIAL.—On the 3rd inst., at a luncheon provided by J. H. L. Wingfield, Esq., a very handsome testimonial was presented to John Costall, Esq., of Market Overton, Rutland. It consisted of a silver teapot, cream ewer, sugar basin, claret jug, candelabrum and salver, upon which was beautifully engraved the following inscription:—"This service of plate was presented to John Costall, Esq., M.R.C.S., by his friends and former patients as a mark of their respect, and in grateful acknowledgment of his skill, attention, and kindness during a medical practice of more than fifty years. February, 1866." Accompanying the presentation was a list of about 300 subscribers.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEB. 27TH, 1866.

DR. ALDERSON, F.R.S., PRESIDENT.

ON GRANULAR DEGENERATION OF THE VOLUNTARY MUSCLES.

BY E. MERYON, M.D., F.R.C.P.

SINCE 1851, when Dr. Meryon communicated to the above-named Society an account of this disease, the details of which were published in its "Transactions" in 1852, four more cases have fallen under his observation. In one, which terminated fatally in 1859, the post-mortem examination was carefully conducted by Mr. Savory, who, during a searching microscopical investigation, failed to detect a vestige of disease in any part of the nervous system. The disease appears to consist in a gradual but progressive breaking up of the amorphous membrane which envelopes the primitive muscular fibres, and of a dispersion of the contained granular matter. After these preliminary observations, Dr. Meryon proceeded to describe the case of a gentleman, aged twenty-two, who was present at the meeting, so that the Fellows had an opportunity of examining his present condition. At the age of five years he began to show symptoms of weakness in the loins by a waddling gait; and, in the course of two or three years, he had difficulty in bending the thighs on the body, as in the act of getting up stairs; next he gradually lost the power of bending the legs on the thighs; and eventually the voluntary motions of the feet and toes were lost also. The morbid action then began to manifest itself in the upper extremities, and the patient has now no longer the power of raising his arms to his head; but he can bend the forearms on the arms, and he still retains a firm grasp with the hands. The tendency of the disease, however, is to extend itself from the proximal to the distal portions of the extremities, and then to attack the muscles of respiration; but in no case are the involuntary muscles or muscles of organic life affected. The history of one case is the history of all; and on the uniformity of the symptoms and the order of their appearance, &c., Dr. Meryon has attempted to distinguish this form of paralysis from all others which are dependent on lesions of the peripheral nerves or nervous centres—1st, by the centrifugal course of the disease, irrespective of the course and distribution of nerves; 2nd, by the entire absence of any symptoms of nervous disturbance during life; and 3rd, by the absence of any trace of lesion in any part of the nervous system after death—at least so far as the most careful investigations have extended up to the present time. There is another difference observed in the muscles thus affected, as compared with paralysed muscles dependent on nervous lesion: it is in the disruption of the sarcolemma and the segregation of the granules which constitute the sarcous matter in the former case; whereas, in the latter, the primitive fibres gradually waste, the transverse striæ gradually disappear, and oil-globules by degrees fill the interspaces of the fibres, and occupy the space which the healthy muscular tissue formerly occupied. Dr. Meryon's patient affirms that both he and his sister, who is also a subject of the disease, have retained the condition in which they were when they began to take arsenic. The gentleman has been under the influence of that medicine a little more than a year. In conclusion, Dr. Meryon adverted to the question of priority of description of this peculiar form of disease. He quoted passages from several of the French medical periodicals in relation to this matter. It is unnecessary to report these, though the following fact may be mentioned—that at the Academy of Medicine M. Cruveilhier referred to Dr. Meryon's plates in illustration of his (M. Cruveilhier's) own diseased muscles, and called the attention of the Academy to a form of paralysis "non encore décrite." Dr. Meryon's paper had been published in THE LANCET more than a year before, and shortly afterwards appeared also in the Society's Transactions.

Mr. SKEY said that during a period of some fifteen months, in which he had the charge of the young gentleman of fifteen years of age alluded to by the author, he was informed of an example of a similar disease in one family only, residing in a remote part of Dorsetshire; and with regard to treatment, nothing satisfactory had yet been accomplished. The case related in the paper was interesting from the circumstance that the manifestation of a morbid condition of the muscular system was not developed till a late period of childhood, or rather perhaps an early period of boyhood—namely, eight years of age. In all the cases with which he was acquainted the change from health to disease commenced in infancy; for while these children were still in their nurses' arms they showed a want of activity and elasticity of movement peculiar to the disease. Again, he observed another peculiarity in the fact that in the cases quoted by the author the change of structure was not confined to one sex; whereas in the two families under his cognizance the females were entirely exempt, and it was the more remarkable because in the family of —— the daughters were noticeable for their healthy and handsome appearance. Nor was it possible to trace the disease from either parent to their male offspring. In the case reported on by the author the morbid changes were confined to the family of the father by his second marriage, thus exempting him from suspicion of personal taint. Supposing the disease to be hereditary, it seemed reasonable to infer that it was obtained through the maternal channel. The treatment adopted consisted in the resort to tonic agents of various kinds—iron, bark, wine, mineral acids, and animal food; but most especially were all the muscles maintained in active exercise at least twice daily, and persisted in up to the point of fatigue: all, however, as the post-mortem appearances showed, without the least benefit. There was one striking feature in this case which he was inclined to consider common to them all—namely, that the morbid changes in the sarcous elements were confined to the muscles of animal life. In the muscular tissue of organic life (the unstriped fibre) no change had occurred; and this he was prepared to expect from the perfectly healthy condition of all the internal functions during life. It could not, then, be asserted that all the muscular tissues are involved, but only those of animal and external life. This fact throws some doubt on the supposed source of the diseased changes in the muscular tissue itself; because if one system be primarily involved, why not both? The sarcous elements are the same, though differently arranged. Why should the myogenic property be arrested in one case and not in the other? If dependent on a morbid state of the nervous centres we must look to the spinal cord, and exclude the ganglionic system, which for the most part supplies the muscular fibre of organic life.

Mr. SOLLY said that though he did not deny the probability of muscular atrophy without disease of the nervous system, he was sure that this view of the pathology of the cases described by Dr. Meryon could not be admitted unless there were more complete proof of the spinal cord being perfectly healthy. He felt confident that, in order to detect disease in the spinal cord, it was necessary to examine thin slices of it under the microscope, prepared according to the process enunciated by Mr. Lockhart Clarke; and that until that had been done, we remained in ignorance of the pathology of the disease.

Mr. G. L. COOPER said it had fallen to his lot to see two such cases, and in both instances the symptoms were slow, insidious, free from pain, and ending in a complete degeneration and atrophy of the muscles. He believed that we may assign this disease to a softening of the brain, accompanied by an accumulation of fluid in the coverings of the spinal cord pressing on the nervous centre. The first case was that of a gentleman, about forty-five years of age, who complained of a weakness in his right shoulder, which was soon accompanied by an inability to raise the joint, with an apparent wasting of the deltoid. The muscles of the arm and forearm after a time became flabby and soft, and soon showed a degeneration and atrophied condition of their structure. The left arm has subsequently wasted, and he (Mr. Cooper) suspected would follow the course of the right. The second case was that of a coachman, aged forty-one. He had drunk freely in his early days, and had been exposed very much to the severity of the weather day and night. He suffered from a bad cough with profuse expectoration for many years, but was able to continue his employment until about three years ago, when he noticed a weakness in the thumb of the right hand, which disabled him from holding the whip. The hand soon wasted, and was followed by the forearm and arm in the same condition, with a total loss of power over their action. The left hand and arm were attacked in a similar manner about a year ago, and continued the same course as the right, ending in complete degeneration and paralysis of the extremity, but with more rapidity in its destructiveness. About six months ago his feet, legs, and thighs were similarly diseased, and followed precisely in the same course, ending in complete atrophy or degeneration, with total paralysis. This wasting was not observable in the

muscles of the trunk, and the internal organs exercised their functions with a due regularity.

Mr. LOCKHART CLARKE said that the interesting case which Dr. Meryon had exhibited was considered by him to be one in which there was no lesion of the nervous centres. This opinion was grounded on the absence of pain in the wasting muscles. Now the absence of pain in wasting muscles was no more a proof that their atrophy is independent of lesions of the nervous centres, than absence of pain was a proof of the same independence in cases of motor paralysis. And as we had muscular paralysis without pain, but dependent on lesions of the nervous system, so he believed we might have muscular atrophy without pain, but dependent on the same cause. But whatever *à priori* opinions might be formed on the subject, the question could be decided only by the evidence of post-mortem examination. A few months back a very decisive case came under his notice; or, rather, he received from Mr. Paget the pons Varolii, medulla oblongata, and part of the spinal cord of a child who had died with muscular atrophy of the upper extremities and of other parts, but who had never, he (Mr. L. Clarke) believed, experienced any pain whatever. In the cervical enlargement a small area was discovered, in which the nerve-tissue of the central grey substance had undergone evident disintegration. The pons was healthy, as was every part of the medulla oblongata, except one, where some granular exudation was found extending through the spinal accessory nucleus from behind, and reaching forward into the nucleus of the hypoglossal nerve. At the same level, the lateral parts of the medulla oblongata had undergone a certain amount of disintegration. As Mr. L. Clarke had not received any detailed history of the case, he wrote to ascertain whether the tongue was not in some way affected, and received an answer informing him that the tongue was the part in which the atrophy had commenced. Here, then, was satisfactory evidence of lesions of nerve-centres in a case of muscular atrophy in which there was no pain. This was the more important because pain was not experienced in more than about one-third of the cases of this malady. But when it did occur it was often very significant. Sometimes it took the course of particular nerves, either before or during the wasting of the muscles. Again, the nervous character of muscular atrophy was occasionally indicated by its beginning with an attack of temporary paralysis. Romberg had related a case which began with hemiplegia of the left side. The leg completely recovered, but the arm remained weak, and its weakness corresponded with the wasting of its muscles. No pain was experienced.

Mr. HOLMES COOTE, in remarking on the interesting nature of the cases now before the Society, said that they were not so uncommon as some of the members supposed, but were "grouped together" in certain hospitals or under the care of special practitioners. He had seen, both in the adult and the infant, many cases of such progressive muscular paralysis—a disease which, in course of time, rendered even the bones light and easily broken. In the infant the functions of the sensorium were sometimes disturbed; sometimes not. So also in the adult. And no one had done better service in this department of pathology than Mr. Lockhart Clarke, who had succeeded in demonstrating morbid changes in the grey matter of the nervous centres. His investigations had paved the way to a better classification of these cases, by assigning to them in their varieties one common primary seat—namely, the grey matter of the nervous centres, from whatever cause such disease might arise.

Dr. FULLER said that it had fallen to his lot within the last few years to meet with seven well-marked examples of the disease, which, in their progress and in the mode of evolution of their symptoms, resembled precisely the cases related by Dr. Meryon. The cerebral functions remained unimpaired to the last, and the paralysis, which commenced very gradually, did not follow the course of particular nerves, but fixed upon particular bunches of muscles, first in one part of the body, and then in another, quite irrespectively of their nervous connexions. In some of the cases, pain in the limbs and fibrillary twitching of the affected muscles were prominent symptoms; in others, pain was absent, but fibrillary twitching was well marked; and, in two of them, there was no pain, and only the faintest twitching. In one respect Dr. Fuller's cases differed from those detailed by the author of the paper—they all occurred in adults, and in most of them the symptoms appeared to have originated in nervous exhaustion. In one instance, and in one only, the muscles of organic life appeared to be affected. In that case, which Dr. Fuller saw in consultation with Dr. C. J. B. Williams, the heart, about two months before the patient's death, became extremely feeble in its action, and the pulse fell to 26 in the minute. Dr. Fuller agreed entirely with Dr. Meryon in regarding this disease as quite distinct from ordinary paralysis; and he regarded it also as distinct from the creeping paralysis of the insane, which he believed to constitute the bulk of the cases referred to by Mr. Holmes Coote. As some confusion exists on the subject, Dr. Fuller thought it very desirable that a special title should be assigned to the disease, for at present the nomenclature is quite unsettled.

Dr. BARCLAY said that previous speakers seemed to him to have lost sight of the distinction which Dr. Meryon had sought to make between muscular degeneration as a cause of paralysis and those other forms which depended on disease of the nervous system. He (Dr. Barclay) believed that several different forms of paralysis had been referred to, and that when the correctness of some of the author's observations was impugned it was because other forms of paralysis presented symptoms different from those traceable in muscular palsy. The presence or absence of the symptoms referred to was the test by which the true character of the affection became known. This was particularly true of the so-called centrifugal direction in which the disease proceeded, in opposition to the ordinary course of gradually extending paralysis dependent on progressive disease of the nervous system.

Mr. LOCKHART CLARKE, in reply to Dr. Barclay, said that he had been asked whether the morbid changes in the nervous centres might not be the consequences of the muscular wasting. He was sure that the changes he had observed were not so; for they were not simple atrophy of the nerve-tissues, but disintegrations, arising either from softening or from morbid exudations. Moreover, he had lately examined the spinal cord (given him by Dr. Dickinson of St. George's Hospital) of an old pensioner who had lost one of his legs a great many years ago; but he was scarcely able to perceive any difference between the two sides, and there was certainly nothing at all resembling the disintegrations that he had found in cases of muscular atrophy. For an account of these cases, which he had published, he would refer to recent volumes of the *British and Foreign Medico-Chirurgical Review*, and of Beale's *Archives of Medicine*, particularly to No. 13, vol. iv., which contains one of the most important and interesting cases of any disease on record. He did not, however, wish to be understood to mean that there was no such thing as muscular atrophy without lesion of the nervous system. Such a disease might exist, but the question could be determined only by a sufficient number of post-mortem examinations.

Mr. SKEY fully endorsed the truth of the observations of Dr. Barclay. They were discussing various forms of paralysis. He spoke only on that form described by the author of the paper, which is special, if not specific, and which consists microscopically of a deposit of oil or fat globules in the place of muscular tissue. He still believed the disease a very rare one.

Mr. SOLLY said he thought that Mr. Cooper's case was analogous to the scrivener's palsy, where a nervous centre was exhausted by overwork, and that it might be entitled the driver's palsy, adding another to the list, such as the musician's palsy (of which he had lately had a case under his care), the milker's, the shoemaker's, the nailer's, &c.; but there was no analogy between these cases and those of Dr. Meryon.

Dr. BARKER referred to a case of muscular atrophy which had been under his care in St. Thomas's Hospital. The patient was a gardener, not over forty years of age. The first symptoms of the disease were a tripping in his walk, and an inability to prune trees. These were followed by general loss of power. When he first came into hospital he was plump in appearance, but the muscles of the arms, legs, and thighs were wasted. With the exception of complete loss of muscular power the man was in every respect well.

Mr. HOLMES COOTE assured the last speakers that he had had very many opportunities of seeing such cases, not only in Bethlehem Hospital, but also at the Orthopædic and St. Bartholomew's; and that he was not at all likely to fall into the error assigned to him.

Dr. WEBSTER said, in reference to the author's statement regarding a recent speaker at the Paris Academy of Medicine, who had claimed the merit of being the first to notice the malady now under discussion, it should be remembered that French medical men rarely read English periodicals and seldom speak the language; hence no one ought to feel surprised if professional questions occupying attention in England do not always become immediately known beyond the Channel. In proof of this, he would mention that at the library of the learned body just named no English medical journal is acces-

sible for perusal. At least, this was the case not long ago, when he visited the library of the Imperial Academy, where the only English periodical publication shown him by the courteous official of whom he made inquiry was the Registrar-General's Report of Marriages, Births, and Deaths, sent by the British Government. In fact, the tables of that institution are scantily supplied with foreign medical literature, and very unlike not only this Society, which receives numerous journals of various countries, but likewise dissimilar to several continental capitals, such as Stockholm, Lisbon, and others, which he might specify from his own personal observation. Therefore Dr. Meryon need not deem it strange whenever any French observer thinks himself an original discoverer, seeing the circumstances above related may perhaps furnish a satisfactory explanation of the assumption narrated.

Reviews and Notices of Books.

The Treasury of Botany, or Popular Dictionary of the Vegetable Kingdom; with which is incorporated a Glossary of Botanical Terms. Edited by J. LINDLEY, F.R.S., late Emeritus Professor of Botany in University College, London; and T. MOORE, F.L.S., Curator of the Chelsea Botanic Gardens: assisted by eminent Contributors. In Two Parts, with Engravings. London: Longmans and Co.

THE original suggestion of a book of this kind came, we believe, from Mr. Maunder himself, the originator of the series of "Maunder's Treasuries," but was in a form which rendered it impracticable. Having once entertained the question, the publishers very wisely consulted the late Dr. Lindley, whose high abilities, clear and logical mind, and power of popularizing science, made him the most fitting editor who could have been chosen. Fortunately this was before his great physical and mental powers gave way; so that the "Treasury" had the advantage of being broadly planned by him, while, in working out the details, he was ably seconded by Mr. Moore, on whom, very shortly after the printing was commenced, the whole weight of the editorial duties fell. Compelled by a failing memory to relinquish a task he had scarcely begun, Dr. Lindley, alas! did not survive to see his design assume its accomplished form. His disease proved more rapidly fatal than could have been anticipated, and the last lines had scarcely fallen into the printer's hands when he passed away from amongst us, a martyr to science, for which he had worked so incessantly—not perhaps wisely, but too well. His works bear witness.

The matter has been contributed by a variety of hands, including such well-known names as Drs. Balfour, Masters, Dickie, and Seemann; the Revs. Mr. Berkeley and Mr. Johns; Messrs. Black and Smith, of Kew, both, alas! departed before their labours saw the light; Mr. Thompson, of Chiswick, a venerable authority on questions pomological, &c.; while the orchids were in part, and a very complete glossary wholly, contributed by Dr. Lindley himself; and Mr. Moore treated on the subject of his specialty—the ferns. Some notion of the labour involved in the work may be gathered from these two facts—that the MS. formed a pile six feet in height, and the printed work consists of 1274 pages, averaging over 1000 words each. No wonder, then, that with this bulk, and the small though beautifully clear type used, the book should have been something like four years in passing through the press. The printing was commenced in the early part of 1862.

To the general reader the most interesting articles will, doubtless, be those of Dr. Masters on Medicinal Plants, of Mr. Smith on Economic Plants, of Mr. Booth on Vegetables, and of Mr. Thompson on Fruits; but the chief value of the "Treasury" will be as a book of reference, to be brought into use whenever an unknown name of plant or flower or vegetable product should chance to turn up in one's reading or in the course of conversation.

Rhinoscopy and Laryngoscopy; their value in Practical Medicine. By Dr. FRIEDRICH SEMELDER, Physician in Ordinary to his Majesty the Emperor of Mexico, and formerly Surgeon to the Branch Hospital at Gumpendorf, &c. Translated from the German by EDWARD T. CASWELL, M.D. With Woodcuts and two Chromo-lithographic Plates. New York: W. Wood and Co.

THIS work consists of two essays published by Dr. Semelder in March and December, 1862, respectively, and which are translated by Dr. Caswell, who had the advantage of the author's instruction and intimacy whilst resident in Vienna.

The first half of the volume possesses the greater interest for the British reader, since rhinoscopy has received but little attention in this country as compared with laryngoscopy, which has been so successfully cultivated by Johnson, Gibb, Mackenzie, and others. Originating with Czermak in 1858, it has been diligently practised in Germany, and, to a small extent, in this country; but its comparative want of progress is no doubt due to the difficulty of the proceeding, and, as the author says, "the many practical courses he has given show him clearly that the rhinoscopic method is far more difficult than the laryngoscopic; and such, indeed, is naturally the case."

Dr. Semelder proceeds to describe the naso-pharyngeal space with great minuteness, and gives a drawing of it made from the living subject by a series of rhinoscopic examinations; and then describes the mirrors, &c., which he has found useful for the purpose. The size of the mirror which the author uses is from 1–2 centimètres (0·39–0·78 inches) in diameter. "The mirrors ought to be thick in order they may remain warm longer. For the inspection of the posterior nares, mirrors in which the angle of attachment to the rod approaches nearly to a right angle are the most advantageous."

After detailing the method of examination by means of the palate-hood and mirror, the author says:—

"With regard to the facility of execution of this method, it may be observed that the nasal septum, the openings of the posterior nares, and the posterior surface of the middle portion of the soft palate are easily seen. The lower portion of the openings of the nares, the floor of the nasal cavity, and the inferior meatus are nearly always concealed by the velum. The upper portions of the naso-pharyngeal space may also be easily seen; the lateral portions are more difficult, including also the opening of the Eustachian tube—indeed, this last was not recognised for a long time; the posterior wall is seen incompletely and much foreshortened. As for the position of the mirror, the following is almost of itself evident: the more perpendicular the mirror stands the more clear images does it give of the anterior parts; the more horizontal it stands the more it illuminates and reveals the superior and posterior region. With an almost horizontal position of the mirror we can gain images of the posterior nasal openings, but shortened, and hence unnatural. The higher the mirror can be introduced, and the more perpendicular it stands, the more natural and the more clear is the image which it gives of the anterior portions; the anterior inferior portions (the inferior curve of the openings of the nares) can only be seen when the soft palate is drawn entirely forwards, or when it is very flaccid, and the space at the same time very large. The image in the mirror is reversed laterally; that which is above is also in the reflected image above (and behind); what is below is also below (and in front); the image of the right opening of the nares appears in the mirror at the left of the observer, and that of the left at his right. It should be mentioned, moreover, that such reflected images never give with entire accuracy the true size of the object. A single consideration will convince every observer why it is so. The reflected image could only correspond exactly to the size of the object when the corresponding axes of the object and the mirror stand in a right line with each other. Even with a respectable amount of anatomical knowledge the majority of practising physicians will hardly be sufficiently clear upon the details of the naso-pharyngeal space to be able to forego preliminary exercises upon the cadaver and upon good models."

A limited number of pathological observations are quoted by Dr. Semelder from his own practice and that of others, bearing principally upon the diagnosis of pharyngeal polypi

and of obstruction of the nares and Eustachian tubes. As the whole study of disease by the rhinoscope is yet but in its infancy, it would be unfair to criticise the unsatisfactory results of some of these attempts; though in others the instrument served to clear up difficulties, and in a few to facilitate treatment.

The second part of the work—on Laryngoscopy—presents no great novelty; nothing, in fact, with which those who have practised laryngoscopy in this country are unacquainted. The author describes the different forms of apparatus which have been contrived by Czermak, Türck, and others, and gives ample instructions for their practical use. A series of pathological observations, including cases of removal of growths from the vocal cords, concludes the work, which ends as follows:—

"The 'patience and perseverance' of the Germans, so wondered at by the French, and the German 'cold-bloodedness,' which astonishes them so much, have again won a triumph. Czermak, to whom we owe all our progress in this department of surgery, can look back upon the last six years with contentment and pride. His name is for ever united with the history of laryngoscopy; and I am proud to have been his earliest student. To him I dedicate these lines with grateful affection and friendly regard."

OUR LIBRARY TABLE.

Our Domestic Fireplaces: a Treatise on the Economical Use of Fuel and the Prevention of Smoke. With Observations on the Patent Laws. By FRED. EDWARDS, jun. Second Edition; 8vo, pp. 110. *A Treatise on Smoky Chimneys, their Cure and Prevention.* By FRED. EDWARDS, jun. 8vo, pp. 40. London: Hardwicke. 1865.—Of recent books, Mr. Edwards's treatises on Domestic Fireplaces and Smoky Chimneys ought to have one of the largest circulations. They deal with subjects that few households have not an immediate interest in. In spite of improved structural arrangements of modern houses, a smoky chimney is still, alas! far from being a rarity; and the hearth which poets and patriots have dignified as a national characteristic is too commonly the imposition of a Birmingham iron-merchant. Architects and builders still largely persist in dealing with chimneys and fireplaces by a time-honoured but barbarous rule of thumb, and thus subject to untold miseries from smoke and chills a docile, because in this matter ignorant, public. Not only discomfort, but also waste, is a result—waste of heat and waste of fuel: considerations far from being of secondary importance to the householder when meat is well-nigh at a famine price, and when ominous whispers of the probable exhaustion of some of our best coal-fields at no distant period crop up in scientific circles, and tend to heighten the price of the (in the metropolitan market at least) already costly fuel. Now fireplaces and chimneys fully deserve and well repay a systematic and careful study. This concerns the householder as well as the builder—the former even more closely than the latter. Mr. Edwards has long given attention to this subject, and in these excellent treatises he discusses the objects and construction, proper and common, of fireplaces and chimneys; laying down rules for their legitimate formation, as well as for the removal of the imperfections and abatement of the evils which too generally exist. We commend these books to all who have a righteous desire to compass chimneys which never require coaxing, and fireplaces which are not insatiable craters, ever consuming but never warming. Not the least merit of these little treatises consists in their abundant illustrations.

Tension of the Eyeball, Glaucoma, &c. By J. VOSE SOLOMON, F.R.C.S. London: Churchill. 1865.—The author here reproduces some studies of glaucoma, and of the history of operations practised for it, which well deserve the permanent form now given to them. We are no great believers in the "intraocular myotomy" theory, for we hold it to be founded on inaccurate anatomical data; but paracentesis is useful when it does not waste time by superseding the more valuable proceeding of iridectomy. This monograph is well worth reading, and testing by clinical experience.

Contributions to Practical Surgery. By WILLIAM STOKES, jun., M.D., &c. Dublin: John Falconer. 1866.—This is an interesting paper on the treatment of granular ophthalmia by pressure, for which Dr. Stokes has devised an apparatus which he finds successful in practice, and recommends for use by the practitioner.

De l'Emploi et de l'Action de l'Arsenic en Médecine. Par le Dr. A. WAHU. Paris. 1865.—A very ill-written and foolish monograph, which will not give its author much reputation in this or, we should imagine, in any other country.

The Sanitary Condition of the Poor in relation to Disease, Poverty, and Crime. London: Tweedie. 1866.—Mr. Benson Baker enforces with intelligence and ability lessons of which the import is well understood by all physicians, but which need to be constantly repeated in order that they may be acted on by the public at large.

The Royal London Ophthalmic Hospital Reports, Vol. V., Part I., contains, amongst other papers of value, the commencement of a series of ophthalmic miscellanies by Mr. Bowman, including cases of considerable interest observed and described with characteristic skill and sagacity; cases of neuro-retinitis, by Mr. Hulke, with accurate and valuable microscopic descriptions of the lesions of the retina associated with kidney disease; and other papers of value.

Illustrations of Disease with the Microscope. By FRANCIS P. PORCHER, M.D. Part I. Charleston, S.C.: Evans and Cogswell. The work bears date 1861, but it has only just reached us. We shall analyze it more minutely when completed.

S. MAW & SON'S *Catalogue of Surgeons' Instruments* is remarkable for its completeness, for the beauty of its illustrations, for the great variety of instruments and apparatus which it figures, and especially for the very moderate prices at which the instruments are marked. Such catalogues are of infinite service to the practitioner. A drawing of an instrument is worth a page of description; and this is one of the best illustrated catalogues which we have yet seen. It contains many hundred excellent figures, and is altogether a most useful and highly creditable production.

The Illustrated Horse Management. By EDWARD MAYHEW, M.R.C.V.S. Longmans.—This work gives the anatomy, mode of physicking, shoeing, and feeding the horse, construction of stables, &c. It must be of great value and interest to those members of the profession who keep horses. The illustrations are extremely good.

The Horsetrainer's Guide. By DIGBY COLLINS. Longmans. This is another useful work on the treatment of horses and their diseases. It is of more interest to the veterinary surgeon and trainer than to the medical practitioner. There are, however, many hints respecting the treatment of diseases which affect horses that are worthy of consideration.

Debrett's Illustrated Peerage and Baronetage, Knightage and House of Commons, 1866. Two Volumes. Dean and Son.—This useful work has met with very general support for upwards of a century. In the present annual issue some improvements have been made. The family names of peers have been introduced in alphabetical order—a plan which is fraught with many advantages; the addition of a biography of each peer's immediate predecessor; and also biographical notices of members of the Lower House of Convocation and of the members of the new House of Commons. This issue of the work is complete in every particular, and sustains its well-earned reputation.

HEALTH OF THE UNITED KINGDOM.—In the week that ended on Saturday, Feb. 24th, the births registered in London and twelve other large towns of the United Kingdom were 4709, the deaths registered 3638.

THE LANCET.

LONDON: SATURDAY, MARCH 10, 1866.

IT would seem that railway accidents, with their attendant claims for compensation, are becoming quite as much a part of our social system as is the regular occurrence of a certain number of cases of crime. Let education and moral improvement do what they will, the criminal record year by year exhibits a list which varies but little from one epoch to another. And in like manner, notwithstanding the strong expression of popular feeling which follows every fresh mischance, accidents will happen on the best-regulated railways. It is difficult, indeed, to see any end to this condition of things. Where, as in the railway system, so much depends, and must always depend, upon individual care, it would be in opposition to the common experience of human frailty to expect that accidents arising out of neglect and analogous causes are likely to become less numerous as the extension of the railway system becomes more and more vast and complicated. There can be no question that the dips into the pockets of shareholders which such accidents entail form a rough, but nevertheless the best, safeguard for the public; and we should be sorry to see this mode of protection weakened in its efficacy. At the same time it must be remembered that this is an arrangement beset with difficulties and disadvantages. The temptation to persons of low moral sensibility to trade upon such occurrences is very strong, and it behoves the medical profession, whose part in these actions is a most important one, to guard, by every means in their power, against lending a help, which is very powerful, to the designs of fraudulent individuals. For this reason the consideration of trials for compensation is always full of interest. As a scientific body, we are invested with a duty which embraces the interests of the general public, including railway shareholders, as well as of those members of the community who allege injury from railway accident. And a great danger of this being overlooked lies in the fact that cases which come to trial almost always end in a verdict for the plaintiff. Indeed, this has arrived at such a pitch that railway companies will often, we have reason to believe, settle a case of manifest imposture rather than incur the almost certain defeat which will attend their cause in a court of law. With minds naturally incapable of weighing the value of scientific evidence, juries will continually throw into the consideration of a case an amount of personal feeling before which points of diagnosis and prognosis sink into the shade. There is usually a tolerable amount of evidence of the plaintiff having received a blow or shake. Each juryman remembers that he may any day find himself in a similar predicament, and his sympathies are so powerfully excited in favour of the sufferer that he is often quite incompetent to determine whether any serious injury has really been sustained. It is worth while noting, too, that the medical evidence for the defence is often placed in a false position. Persons are very apt, when they see this or that physician or surgeon frequently called to give evidence for a railway company, to jump to the conclusion that it is the constant and invariable habit of these gentlemen to endeavour to disprove by their evidence the existence of real injury on the part of a claimant for compensation. Now, it should be remembered that in most cases these very authorities are employed by the railway company to inquire into a large number of cases of alleged injury. In the nature of things, we hear only of disputed cases. We see the medical witnesses in these instances lending their aid to lessen the amount of damages. Nothing is known, generally, of that very much larger class of cases in which the same authorities offer no opposition to the claims of the sufferer, and in which compensation, often to a very considerable amount, is given without the injured person coming into court. It is but right that this point, which is generally overlooked, should not be forgotten, if only in justice to men whose position in a case is necessarily one which meets with but scant sympathy. Let us not be misunderstood. We can scarcely characterize in too strong terms the conduct of a medical witness who sells his opinion to a railway company in the hope, possibly, of future remunerative employment. On the other hand, we think that a member of the profession who knowingly lends his aid to the exaggeration of the amount of injury sustained by a patient is just as culpable, and even does more damage to the community. What we want in this matter is the truth, and it should be the general aim to lend assistance in this direction.

The month of February has seen several of these cases brought to trial at Guildhall.

On Feb. 7th was tried the case of MIRINS *v.* the London, Chatham, and Dover Railway, who admitted liability, and the question was as to the amount of damages. The plaintiff, who is a gentleman of colour from the West Indies, was much bruised and shaken in an accident at the Ludgate-hill station. He had afterwards symptoms of weakness—giddiness, stars before the eyes, bleeding from the nose, &c., and was ordered to keep quiet. Instead of doing this, it was alleged, by the evidence of two detectives, that he had gone to various music-halls, and indulged in dissipation. Nevertheless he obtained £250 damages.

On Feb. 14th a young lady, named PRICE, brought an action against the South-Eastern Railway for damages in an accident. The Company admitted liability, and paid £400 into court. It appeared that the plaintiff had received no very severe external injury, but more important symptoms subsequently developed themselves. Dr. REYNOLDS, Dr. WALSH, and others showed that she was affected with progressive disease of the spine, caused by the accident. The defendants called no witnesses, and the sum of £800 was awarded in addition to that paid.

An old lady, named HITCHIN, obtained £500 from the London and North-Western Railway Company on Feb. 19th. The carriage in which she was travelling was upset near Oundle on May 24th, 1865. She received no severe external injury, but there was general shock to her nervous system. Her medical attendants believed that the spinal cord was injured, that there was partial paralysis, and that her brain was affected. No witnesses were called on the other side.

So likewise, on Feb. 24th, the case of ELAND and Wife *v.* the South-Eastern Railway Company was undefended as far as medical testimony was concerned. The plaintiffs appear, by

the evidence of Sir WM. FERGUSSON and others, to have sustained very serious damage in the Staplehurst accident, from which it was doubtful whether the husband at least would recover. Travel was recommended. The Lord Chief Justice told the jury that they must give damages, not only for personal pain and bodily injury, but for the pecuniary loss occasioned, including the probable expenses of travel &c. The sum of £4500 was awarded.

Passing over two or three cases which present no particular scientific interest, we come to that of MEAKIN *v.* Midland Railway Company, tried in the Court of Exchequer on Feb. 20th. This was important on account of the difference of opinion exhibited by the medical witnesses on either side. The plaintiff is a guager in the Customs, who, previous to an accident which befel him at Colney Hatch in August last, was a man of great physical and mental vigour. His lip was cut and teeth damaged, but he appears to have sustained no other severe external injury. It was alleged that his spine was injured, and that he had in consequence great difficulty in using his legs. The witnesses on his side differed a little as to the probabilities of his eventual recovery, but all agreed that a considerable time must elapse before he would be able to resume his duties at the Custom House. Those called by the railway insisted that he had received no lasting injury, and that in a few months he would be able to return to his duties, "as good a man," one said, "as ever." One witness had asked the plaintiff "to point out the seat of pain in his spine, and the spot indicated by the patient he had put his pocket-book upon, and then asked him again where the pain was. The plaintiff had then fixed upon another spot, and [illegible] he had gone on from place to place. The pains were flying p[illegible]. In injury to the spine pain was constant. Any impairment in the functions of the spine," he added, "was followed by paralysis." Such is the report in *The Times*, which may, or may not, be quite accurate. It is enough, however, we think, to show the obscurity which involves this kind of injury when a rather strong opinion is formed upon so rough a mode of examination. If the opinion of this gentleman is correct, of course there is an end to all further doubt about a class of cases which most observers feel is beset with difficulty of diagnosis. But with regard to impairment in the functions of the spine being always followed by paralysis, we had thought that this was just one of those points upon which scientific men are not prepared to dogmatize; whilst in reference to the *constancy* of pain we chance to have at the present time under observation a patient with undoubted paraplegia whose pains in the spine have all along presented this "flying" character. We do not doubt the genuineness of the opinion expressed by this witness, but we apprehend that his grounds for holding it are by no means sufficient.

It is worthy of note that in each of these disputed cases the *causa belli* was the same—namely, an absence of very evident injury, coupled with a history of anomalous symptoms of impaired nerve function. These are the conditions, indeed, which in the very large majority of instances bring a case into a court of law, whilst fractures, wounds, bruises, &c., present comparatively little difficulty in adjustment without such appeal. It is manifest that our information upon this point is of the most meagre description, and in the absence of more correct data opinions must inevitably be often represented by guesses. The inquiry upon which Dr. BUZZARD is now engaged will be important, even if it does no more than bring together a number of such cases for comparison. We may well hope that, the first step once taken, great light will in time be thrown upon a subject which is as obscure as it is important.

"WHAT I want," says Mr. GRADGRIND, in Hard Times, "is facts;" and this has usually been the great want in Medicine. Nor has the demand been beyond the supply. The quantity has at least been up to the mark, if the quality has occasionally been exceptionable. The former indeed has been so lavish, and the latter so very defective, that, in the opinion of one high authority—CULLEN,—there had already appeared by the middle of last century "more *false* facts than theories in Medicine." This is saying much; for we all know that hypotheses, and strange ones too, have always been in favour with practitioners of the *ars medendi*. Nor is this to be wondered at; for in far less complex and difficult lines of investigation than that of Medicine we meet with plenty of confounding facts and opinions. In the talk of everyday life, in the social arguments around our own boards, there occurs, hourly, this jumble. "Why, this is a fact, now," says SMITH rather warmly, as he finds his Spiritualism at a discount, "that my opposite neighbour saw his table move about in a way that it was impossible any human being could do it." "Pooh!" replies JONES; "I deny that to be a fact: it is only your friend's opinion. Were it otherwise, it would settle the question." SMITH, rather taken aback, begins to think there may be something, after all, in this difference of fact and opinion. It is astonishing, too, with what ingenious artifices the false facts will take up in order to maintain their respectability. Like "stuck-up people," they will ape the airs of their betters with a mock dignity which is really charming. They go through the performance so often, and at last with such apparent propriety, that they begin honestly to think themselves to be the genuine article. But, much to the advantage of mankind, it often happens that their true nature is discovered, and, like false birds, they are stripped of their feathers, and thus once facts become now opinions. It is not always so easy, however, to discover the cheat at first sight; and there are some false facts so very respectable-looking as to quite astonish us afterwards when we discover they are only opinions. Facts, like human beings, too, are often judged by their acquaintances. If the latter are thought to be respectable, the former may be accepted without much inquiry. It behoves all of the upper ten thousand, then, whether of science or society, to look well into the history of those to whom they would accord neighbourly protection.

In modern times a vast number of "false facts" have crept into medicine and its allied branches under the potent introduction and protecting *ægis* of an array of figures. Something is told that startles us: a sensational *fact* makes the public stare. Doubts are entertained as to its truthfulness, and hints expressed as to there being a fallacy somewhere. "Impossible," is the reply, "the conclusion is based on statistics." On the one side we have a strange sanitary or social condition, and on the other battalions of figures. Between the two a causal connexion is established, and the respectability of the numbered facts and of the state of affairs brought into conjunction with them, is thrust upon our attention under the patronage of statistics as being quite the *crême de la crême* of

scientific pretension. The falsity, however, of many of the facts which have crept into science by *numbers* has been so often demonstrated, that a reaction frequently threatens to exclude all irrespectively which come to us with the card of statistics. And yet we know that, when properly and scientifically conducted, *figures*, *means*, and *averages* are some of the most necessary supports for new facts seeking to be accepted. Some, as we have seen, carry out this doctrine so negligently as to bow to anything introduced to them by the hand of *numbers*. One person challenging demonstration always retorts: "Can you show that the proposition is supported by statistics?" Another, in discussion, sneeringly replies: "As for that, statistics can be made to prove anything."

Between these extreme rights and lefts there is a middle party—more popular, it is true, than scientific—who, admitting the value of statistics, are yet not sure of their exact significance. It is admitted that they contribute to our useful knowledge, but it is not so readily perceived what it actually is which they contribute, and in what way. Some such thoughts as these probably went through the mind of a well-known Fellow of the Manchester Statistical Society when he tried to help its members to "pass an agreeable and not unprofitable evening in an attempt to determine the true place of statistics in scientific inquiry—in seeking to ascertain in what manner and to what extent the numerical collection of facts may facilitate and lead to useful and practical conclusions." We have come across the "Thoughts" which Dr. NOBLE on this occasion laid before the members of the Manchester Society, and have been struck with their pertinence. Statistics, as Dr. NOBLE observes, have value in proportion as they are accurate and comparable, and possess scientific significance where they tend to the solution of some undetermined problem. In more technical phraseology, they may be said to take on the character of science just to the extent to which they authorize a generalization which points to some law. But a great deal of information clothed in statistical garb is being constantly published that is quite worthless, either from inaccuracy in the figures, or from particular instances being grouped together that have no proper identity nor any comparability when brought to the solution of a difficult question. Dr. NOBLE does not believe that in any instance, however reliable such array of figures and comparisons may be in a scientific view, they are of themselves competent to the definite settlement of a doubtful matter, notwithstanding the frequency of such language as "this or that proposition can be *proved* by statistics." His conception of their office is that they are suggestive, auxiliary, and corroborative, but not *probative*. It is an unfortunate truth, too, that facts and figures are frequently accumulated as if they had some positive value in themselves, apart from any generalized relation to the circumstances of experience embodied in an intelligible formula. For the right apprehension and the just treatment of statistics, it is clear that something more is required than the mere collection of facts and figures. If we would avoid fallacy, we must not bring together for comparison quantities that are incommensurable. Without some practical acquaintance, too, with all or most of the facts and circumstances relating to an undetermined problem, the statist cannot successfully deal with his materials; he cannot, without such general knowledge of a subject, point out the relation of the facts to some law that is available for thorough insight—an insight that shall enable him to estimate their causal connexions and recognise the conditions of their concurrence. *En résumé*, Dr. NOBLE says that statistics have scientific value and practical significance in the measure in which they bring out the general circumstances under which particular phenomena present themselves. Further, he would "reiterate that, if by statistics some persons persist in implying the purposeless collection of numbered facts, it is a sense in which we in this Society should not consent to use the term."

Medical Annotations.

"Ne quid nimis."

THE WORKHOUSE INFIRMARIES SOCIETY.

THE public meeting which we last week announced as being contemplated by this Society has been held, and may be pronounced a success. The disclosures effected by THE LANCET Sanitary Commission were publicly repeated by some of the ablest and most influential of our public men, with much eloquent denunciation of the wrong-doing exposed. The meeting included a very large number of members of both Houses, many more than were mentioned in the lists given in the daily journals; and they belonged to all parties. The chair was occupied by a distinguished Conservative peer; one of the resolutions was moved by Mr. Thomas Hughes, a Liberal of the first water; Mr. John Stuart Mill sent a letter enrolling himself in the ranks of the Association; and, throughout, politicians of all parties have manifested an equal interest in the progress of this scheme for a great practical reform. The precise details of the plan are not yet elaborated, but so far as they were stated to the meeting they include the principles which we last week enunciated: the separation of the sick from the able-bodied poor, the construction of buildings capable of receiving the six thousand infirmary cases which would have to be dealt with, and the levying a general rate in support of them. The burden of the very poor parishes where the sick poor do most abound would thus be diminished, and a uniform, satisfactory, and, in the end, an economical mode of administration would be secured. The precise details of so large a scheme of course involve many difficult considerations. Much must, of necessity, be left to the authorities of the Poor-law Board, supposing (as there is reason to believe) that they are willing to entertain the measure. Meantime, however, the broad features of a plan are being discussed, and the advice and co-operation of the heads of the profession have been sought, so far as the larger features of the medical organization are concerned. A deputation will shortly wait upon Mr. Villiers to lay before him the scheme which the Committee of the Association may decide to recommend. The whole force of public opinion will support one which is moderate, well-proportioned, and as little revolutionary as may be in its propositions. We must hope that the guardians will see that the best interests of themselves and the ratepayers will be served by the proposed measures.

SALARIES OF POOR-LAW MEDICAL OFFICERS: YORK UNION.

WE referred last week, in our notice of Mr. Torrens's measure for providing better dwellings for the poor, to the remarkable reaction which seems to be setting in in favour of "centralization." It must not be supposed, however, that the battle between localization and centralization will be very short, or that either principle will achieve an easy or complete victory

over the other. In regard to all but the more urgent class of questions, such as cholera, or typhus, or cattle plague, "localization," by which we mean the assertion by local authorities of the principle of their ability to govern themselves, will strongly express itself. The fact is, that without good temper on both sides, and a disposition to see the unquestionable advantages of a combination of central and local influence in working the various institutions of the country, we shall drift into all sorts of unseemly disputes; and great interests will be lost sight of in the supremacy of little feelings. It is, as we have said, very much an affair of temper. Local authorities are not apt to be uncivil to central ones if the latter are at all reasonable and good-tempered. They associate their own authority too much with the central powers for this. All authority in the long run is a form of centralization. Accordingly we should expect that when the central authority fails to carry with it the local one, it will often happen, not because of any want of respect for the local, but on account of the questionableness of its own suggestions in the case in point.

There has been a somewhat sharp collision between Dr. Edward Smith, the newly-elected Medical Inspector of the Poor-law Board, and the guardians of the York Poor-law Union. The points of difference between the able inspector and the guardians referred to various matters in the workhouse dietary; the disposal of imbeciles and idiots in workhouses; and, most especially, the question of the salary of the medical officer of the workhouse, Mr. North. Perhaps our disposition generally in regard to disputes between local and central authorities is to agree with the central. We are, therefore, all the more pleased on this occasion to be able rather to side with the guardians. The guardians of the York Union seem to have a good medical officer in Mr. North; and, more than this, they seem to know it. For years past the amount of work devolving upon Mr. North has been increasing; and for years past, to their credit be it spoken, the guardians have been perceiving this, and feeling the necessity for adjusting Mr. North's salary to his increasing amount of work. In 1853 Mr. North was appointed medical officer, and took charge of about forty-two sick people, at a salary of £40 a year. In 1857 the sick poor for whose treatment Mr. North was responsible, had increased to about ninety-three, and his salary was raised to £70. In eight years from this, or 1865, the number of sick and insane people to be looked after by Mr. North was over 150, and the guardians unanimously adopted the suggestion of the Finance and Workhouse Committees that Mr. North's salary should be increased to £120 a year. If Mr. North, as a comparatively young and inexperienced man, was worth £40 a year in 1853 for looking after an average of forty sick people, it would be difficult to show that in 1865, after twelve years' additional experience and good service, he would be overpaid by £120, for attending to over 150 people. But the Poor-law Board, and, still more remarkably, Dr. Edward Smith, their medical adviser, object to this increase of Mr. North's salary, and think it premature. Well, in one sense it is premature. The general rate of remuneration of Poor-law medical officers is much below this. We lately had to remark upon the case of a Poor-law medical officer who for about seven hours' duty a day in a parochial district, besides all sorts of urgent extra duty, got £50 a year, with sharp dismissal on the first apparent—but very doubtful—failure of duty. So that in the sense that recognition of the pecuniary value of medical services on the part of Poor-law authorities is not general yet, the more generous suggestion of the York guardians would be "premature," but in this sense alone. There is no doubt that a better time is at hand for Poor-law medical officers,—rather we should have said for the poor: a time when men who value themselves and their services too much to sell them for the wages of a labourer will not be unwilling to attend the poor; when boards of guardians shall follow the example of that of York, and show a disposition to respect professional labour. What should we think of guardians who contracted on the lowest terms for beef and bread, and shut out all the best butchers and bakers? And "is not the life more than meat?" No doubt medical practitioners are to blame for the eagerness with which they have taken these poor appointments. But for the most part they are taken at the beginning of professional life, to be relinquished or handed over to an assistant as soon as remunerative practice comes, and just when the doctor is becoming the familiar adviser of the poor in their straits of sickness. The guardians of York have evidently got a good officer, and they show their wisdom in trying to retain his services. The ratepayers and the poor will alike thank them. According to a calculation of the Finance Committee, there is a saving to the ratepayers of over £1000 a year effected by having the lunatics treated in the workhouse instead of being sent to an asylum. It may be said, they are not so well treated. This is a question for the Lunacy Commissioners to decide; and they, and previous Poor-law inspectors, have expressed high satisfaction at the way in which the sick and insane are looked after in this infirmary.

We hope, then, that the Poor-law Board will not longer oppose the unanimous opinion of the York guardians in this matter. Great changes are at hand in the whole provision for the sick poor; and if all these are not to be rendered futile, there will have to be a more respectful and considerate treatment of Poor-law medical officers. What is wanted is, that Poor-law authorities should treat their medical officers in the spirit in which they treat their private medical advisers. And we look to the Poor-law Board to be ahead of, rather than behind, boards of guardians in this respect.

THE MEETING OF THE MEDICAL COUNCIL.

AT a meeting of the Branch Council for England on Friday last, it was resolved that the annual general meeting should take place on Thursday, the 17th of May. It seems to us a matter of serious regret that it has been deferred until so late, and that the precise week fixed on should be Whitsuntide week, when the House of Commons will not be sitting. The Medical Acts Amendment Bill is regarded by the profession as of the highest importance. The incidence of the annoyances and injuries resulting from the present anomalous state of the law is not felt by the more dignified and higher-placed members of the profession any more than by the more wealthy classes of society to the same extent as by the poorer grades. But assuredly a main business of the Council is to press for the necessary amendment of the law. When they have once obtained something like protection for the public and the profession under an amended Act, they could meet at the time most convenient for themselves, and without any question on our part. But seeing that the lateness of the meeting last year rendered the efforts of the Council in this direction confessedly nugatory, and that they were this year peculiarly bound to be prompt, energetic, and persistent in their effort to obtain parliamentary legislation, we cannot but observe with great concern the late and inopportune period fixed for meeting. The great costliness of the Council meetings has been for some time a matter of serious consideration; it could only be redeemed by the efficiency of its action and the obvious public utility of the results of its deliberations. The failure year after year to provoke serious parliamentary consideration of the question of which they are the responsible guardians will not reconcile the profession to the annual expenditure of some fifteen hundred pounds for a week of debate.

THE BODIES OF EXECUTED CRIMINALS.

A VERY interesting question has been lately discussed in Glasgow: the propriety of making the most of the dead bodies of executed criminals. The question is a very old one, and has been the subject of discussion and legislation for centuries.

We get a concise history of the legislation upon this matter in the address lately delivered by Professor Buchanan, of Glasgow, and in the *Glasgow Herald*, which has supported the Professor in his views. This is briefly as follows:—In 1540, a law was passed in England, which gave annually four bodies of malefactors to the anatomists for dissection. Later than this, dissection post mortem was made a part of the sentence. Every criminal that was executed had to be dissected. The doctor followed the executioner. The consequence of this was that the post-mortem examination of bodies came to be regarded with prejudice by all decent people as a thing ignominious. And some of this feeling survives to this day, despite the efforts of great and good men to show in the interest of the living the wisdom of such examinations. In 1832, the law went to the opposite extreme, and forbad the post-mortem examination of criminals on any account whatever. Dr. Buchanan, supported by the *Glasgow Herald*, complains of this law, and desires that the bodies of criminals should be held available for any use that science and anatomy might dictate at any given time; that, before death, criminals under capital sentence should have the option of a commutation of sentence on the condition of submitting their corpus vile to some riskful experiment that might be for the public good; at any rate, that after death the fullest examination of their bodies should be made legitimate.

We are not prepared to take the same view as that so ably advocated by Dr. Buchanan and our Glasgow contemporary. As a general rule, we should not desire more than that the examination of executed criminals should be permissible at the discretion of the local magistrates. In regard to the punishment of death, we have enough to do to retain it, with all the amenities with which we can execute it; and we have the feeling, in which the general public will share, that to be justifiable it should be made as final and sufficient as possible. Nothing should be done to take from the dignity of the punishment. It may be true that murderers have, by their crime, "become the property of the nation." But surely after having taken the life of a man we should "cry quits," and remember his humanity. The body of such a criminal, if our "property," is a bit of property that we should be glad to have quickly done with and buried out of our sight. We are persuaded that the punishment of death gains dignity by this view. And there is another fact which should give great force to this aspect of the case. After taking the life of a man, we should remember that we have not taken the life of his friends; that they survive to feel as a personal thing every ignominy that we inflict on the executed; and as the friends often include most worthy and respectable members of society, they are the more entitled to some consideration.

The argument derived from the exigencies of students of anatomy is no longer forcible. The supply of bodies for purposes of dissection is not seriously scanty in any of our British schools, and we should fancy the school of Glasgow has no special ground of complaint on this score. But were the supply everywhere scanty, it could not be greatly increased by the "utilization," as suggested, of the dead bodies of criminals. Even if we could compel murderers to time their bloody deeds so as to bring about their own capital punishment in the very thick of the winter session, we should not materially affect the supply of bodies in medical schools.

Two special suggestions remain to be considered. Murderers have, or may be found to have, a peculiar organization, which should be looked for. Science has hitherto been at fault in the discovery of this peculiarity. And especially, according to Dr. Bennett and Sir William Hamilton, phrenological science has been at fault. They have taken the trouble to carefully examine some famous (or rather infamous) skulls which are to be seen in the Edinburgh Museum, and find them to indicate, not "destructiveness," but amiability and all the virtues. Still science is hopeful (and justifiably so) that a closer study of the brain will enable some localization of the material part of distinguishing peculiarities. And we should think it a reasonable and right thing, on permission, and quietly, to examine the peculiar organization of murderers. All that is necessary for this purpose would be the abolition of the clause in the Act of 1832 forbidding the dissection of criminals.

The suggestion of Dr. Buchanan, that criminals should at any time have the option of exchanging death for a dangerous experiment on their body seems to us liable to great objections. The most important one is that it takes from the dignity of the punishment of death, which must be upheld if the punishment itself is to be maintained. The absolute and summary forfeiture of life is of the very essence of the punishment. Another objection is that it would put the physiologist in the place of the executioner—a position false and altogether unenviable. Then, again, it is scarcely possible to conceive a question in medical or physiological science that cannot be settled without bringing the promoters of medical science into what looks so much like an undignified competition with Calcraft.

ONE WAY OF GETTING SMALL-POX AND FEVER.

THERE is no doubt that the only way to get completely out of danger in this world is to get out of it altogether. But yet there are a few gross risks from which anything like respectable legislation should surely save us. We certainly ought to be in no risk of getting into a cab which has just been vacated by a patient deposited at the Small-pox Hospital, the nature of the disease being known both to "cabby" and his "fare." Yet we are in this danger. A case of it was lately published in *The Times*. *A fortiori* we surely should be in no danger, on getting into an omnibus, of finding ourselves confronted with a patient on his way to the Small-pox Hospital, and having his face covered with eruption. Yet this case has lately happened, to our knowledge, and exposed an omnibusful of people to the risk of catching the disease. Can nothing be done to save us from such peril? Will no "member" who wants to make himself really useful take the trouble to give us an Act by which we might, at any rate, fine or imprison somebody — cabman, conductor, patient, or anybody who should be so selfish as knowingly to poison or allow to be poisoned a public conveyance. The conductor might plead ignorance, but not so the cabman (as in the first case—doubtless a common one) or the patient. The suggestion we make is so reasonable that the Act which should embody it would be among the most popular and acceptable, and withal useful, measures of the session. The said Act should also comprehend fever cases. It seems to us that the Small-pox Hospital and the Fever Hospital should be provided with conveyances of their own, and cause it to be advertised that patients are only to be brought to these respective institutions in their own proper carriages. We might enjoy absolute immunity from small-pox. But it is still a frequent and sometimes a fatal disease, owing to our unwitting exposure to it, and our imperfect vaccination.

We had got thus far on this subject when the able letter of Dr. Jeaffreson, in his capacity of Hon. Secretary to the Hospital Carriage Fund—started by Sir MacDonald Stephenson and Mr. T. H. Hills,—appeared in the columns of a contemporary, pointing out in detail, as he is best able to do, the amount of risk that is incurred by the unsuspecting public in travelling in cabs. As to the extent of the evil he says:

"Although of the from 3000 to 4000 fever patients who have of late years been annually taken to the Fever Hospital, by far the larger proportion have been sent in more or less efficient parish vehicles, I can state from personal experience that from 700 to 800 street cabs are annually used for the same purpose. From special investigations, I am in a position to state that, when small-pox is more than usually rife, the same may

be said as to the means of conveyance of patients suffering from that complaint to the hospital at Highgate."

So much for the special hospitals. Here is the experience at one of the large general hospitals. At St. Bartholomew's in 1864,

"There were under treatment 42 cases of scarlatina in its first stage and 27 in its second, and as many as 84 cases of typhus fever. With barely an exception, all these 153 patients were conveyed in cabs, which, in but a few minutes after discharging their fever freight, would be plying for hire, and might be entered by persons little suspecting the risk they ran in entering them."

Thus far the magnitude of the evil. Dr. Jeaffreson and the committee which he represents are taking a most praiseworthy amount of trouble to provide ambulances, exactly carrying out the suggestion we have made above. They have already procured two, which are to be placed in connexion with the Small-pox Hospital and Fever Hospital, and to be at the disposal of any fever patient about to be removed to other hospitals. But they wish to make the provision still more ample, and to establish two or more stations and ambulances at convenient points, so that they may be available for all parts of the metropolis. Moreover, it is designed to place the Small-pox Hospital and the Fever Hospital, and ultimately other stations, in communication with all parts of London by telegraph. A more practical piece of philanthropy has not often been attempted.

It will be observed that Dr. Jeaffreson hopes, by private means alone, to bring about the disuse of cabs and omnibuses as vehicles for patients suffering from contagious disease. At any rate, he does not at present contemplate asking the Legislature to make penal the turning of public conveyances into fever ambulances. The evil pointed out is so great, and the temptations to the use of the ubiquitous cab must be so universal in London, even with two stations for special ambulances, that we are more indisposed than Dr. Jeaffreson to trust to private measures. We are rather confirmed by his graphic letter in thinking this a question for legislation. Every parish should provide its own perfect set of ambulances as it provides its fire-engines and its fire-escapes, to be had on the certificate of a medical practitioner in attendance. Then the use knowingly of a cab or omnibus as the ambulance of contagious disease would be inexcusable, and should be made punishable.

Meantime, however, the subject is in the best of hands. And no one will apply with more effect in this matter, either to the public or the Legislature, than Dr. Jeaffreson. By what our daily obituaries are showing to be a most perilous personal experience, he has acquired a great amount of special knowledge of the subject, and speaks as one who has a right to speak.

THE PHARMACOPŒIA.

As the Medical Council have appointed their annual meeting in London in the pleasant month of May, and at the festive but unbusinesslike date of Whitsuntide, we may not inopportunely recall a resolution passed at the last meeting (April 15th, 1865), on the motion of Sir J. D. Corrigan, seconded by Dr. Andrew Wood,—

"That it is desirable to have a proof copy of the new Pharmacopœia in the hands of the members of the General Medical Council at least one month before the meeting of the General Medical Council, at which the opinion of the Medical Council is to be given relative to its being published, in order to afford to each member of Council the opportunity of making such suggestions to the Committee as may appear desirable."

We have suggested that a copy should also be sent to the presidents of each of the Colleges, to the Master of the Apothecaries' Society, and to the chairman of the Pharmaceutical Society. Our own copy will probably reach us without official intervention; for we can hardly expect the Council to take official cognizance of the critical authority which proved so fatal to their first edition. We heartily hope that the present edition will, after revision, prove universally acceptable; and, that there may be no doubt about it, criticism should be courted before rather than after the printing of a full edition. It is discreditable enough to be under the necessity of superseding the authority of a first edition so soon by altering the second; and hard enough on the profession, who are practically fined for the blunders of the Committee to the extent of some four thousand pounds. It must be hoped that the blunder and the fine will not be repeated.

A NEW MEDICAL CORONER.

DR. JOHN GUY, of Doncaster, has been elected Coroner for that district of Yorkshire, after a fierce and expensive contest. His opponent was Mr. Edward Nicholson, Clerk of the Peace. The numbers at the close of the poll were officially declared to be—for Dr. Guy, 582; Mr. Nicholson, 377. The majority for Medicine over Law, 205. This election is noteworthy from the fact that Dr. Guy was originally opposed by three lawyers, two of whom retired and exerted their influence in favour of the legal candidate. Notwithstanding this combination against him, Dr. Guy was successful. The salary of the Coroner is but £60 a year; but each candidate is reputed to have spent nearly £1000. Voters were brought from long distances, even from the borders of the county; but it augurs well for Dr. Guy that the freeholders of Thorne, a village in the immediate neighbourhood of Doncaster, voted to the number of 110 unanimously for him. We regard this election of a medical Coroner to a district of one of the most important counties of England with lively satisfaction.

We think we may assume that Dr. Guy was cordially supported by his professional brethren. Be it so or not, it is evident that a highly intelligent class of freeholders have shown by their selection on this occasion that the opinion they hold is that the Coroner's is a medical and not a legal office. Great credit is due to Dr. Guy for the spirit which he displayed in contesting a great principle. If the statement be correct that offers of compromise were made to him, which he stedfastly resisted, this is much to his honour. A man who has shown so much public spirit in the cause of his profession should not be encumbered with heavy expenses in its defence on such an occasion. We trust that steps may be taken with a view to reimburse him for his outlay. It is as unjust as impolitic to allow a gentleman single-handed to fight a cause which must be dear to all medical practitioners.

INDIAN ASSISTANT-SURGEONS.

THE *Gazette* of Friday night, published in the daily journals of Saturday, the 3rd inst., contained the following notification:—

"INDIA OFFICE, March 1st.—Her Majesty has been pleased to approve the following appointments to her Majesty's Indian Medical Service:—To be Assist.-Surgeons, Bengal: George King, M.B., Henry Octavius Wilson, William Center, M.B., Henry Black Purves, Theodore Orton, Robert Deacon, Patrick Joseph Heffernan, Dawson Godfrey Massy, George Thomson, M.B., Robert Jameson, M.D., Robert George Mathew, William Duncan, David John Walsh, Robert Moir Milne, M.B., George Massy, George Cumberland Ross, Richard Power, James Knox. Madras: James Byers Thomas."

The Times of Monday last announced that on the preceding day (March 4th) the Peninsular and Oriental Company's steamer *Syria* sailed from Southampton with twelve of the eighteen assistant-surgeons gazetted to Bengal. This is pretty sharp work, since the examinations at Netley are only just over, and the list was only published on Feb. 21st. We fear that the Indian authorities must be in great want of assistant-surgeons if they are thus obliged to hurry off their new levies

with scarcely time to say good-bye to those they leave at home—for the most part in distant portions of the sister countries.

SEA-SCURVY.

DR. W. DOMETT STONE has very usefully renewed the protest which is due from medical men, whose experience leads them to witness the occurrence of scurvy in the vessels of our mercantile marine. It is difficult to make any class of men incur immediate expense which is avoidable, when the economy of evading it is apparent, and the advantages of incurring it are distant. Thus the mercantile shipowners of a lower class will not supply their men with a proper quantity of good lime-juice, preserved vegetables, and fresh water, if they can save money by furnishing inferior qualities and scant quantities. No doubt the danger of short crews and weakened service is a counterbalancing consideration, but it is remote and doubtful, while the saving is immediate. We believe therefore that Dr. Stone and Mr. Leach will have little chance of seeing the number of cases of scurvy admitted on board the *Dreadnought* diminish until they succeed in persuading the authorities to enforce the law, as it stands, with the utmost stringency, or, if necessary, add more severe and well-defined provisions. They have put the case before the public. Why not now address the President of the Board of Trade?

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

CONTINUING, in his fifth lecture, his remarks on the fin-backed, whalebone whales, Professor Huxley observed that the periotic bone (the petrous and mastoidal portions of the temporal in human anatomy) is not united to any of the surrounding bones, but easily detached, unless—as in the form selected for description—it is retained, not by anchylosis, but by the projection of processes from the cranial elements around. The tympanic is peculiar in shape, and very dense and heavy. It is a separate bone, and if, as is sometimes the case, it unites with the periotic, it nevertheless easily breaks off, and thus its presence in the fossil state is often the best evidence of the past existence of certain fossil forms. The lower jaw (or mandible) in the whalebone whales forms a much wider arch than does the upper jaw; the two rami, moreover, are only united together, at the symphysis, by ligament. The ascending ramus is obsolete, and the coronoid process is moderate, if not (as it is generally) very small. The lower jaw is united to the skull by fibrous tissue only, and not by means of a synovial joint. The hyoid is large and peculiar: the body of the bone is anchylosed to what answers to the greater cornua of man. The parts corresponding with his lesser cornua are two strong curved bones connected, by fibrous tissue and cartilage, with the mastoidal region, and not, as has been asserted, with the exoccipital bones. The two pectoral (and only) limbs are very specially modified. The broad scapula has its spine almost at its anterior margin, so that the supra-spinatus fossa is a mere groove. There is a well-developed acromion and coracoid process. The humerus is very short, with a long head and large anterior tuberosity. All the bones of the limb, from the humerus to the ends of the digits, are bound together by fibrous and other tissues, and are quite immobile. Moreover, certain of the digits have more than the typical number of phalanges. There are six carpal bones, the determination of which is difficult; but probably—as in *Sirenia* and many other mammals—the bone at the distal end of the ulna, and to which the fifth metacarpal is attached, is the cuneiform. The posterior extremity is represented by one bone on each side, which is placed horizontally and is quite unconnected with any sacral vertebra. Its only function seems to be to afford attachment to the muscles of the penis and to the crura of the corpora cavernosa. This appears to indicate that it is the ischium, though it may represent yet more. In *these* whales there is, as a rule, no other trace of the hind limb; but Mr. W. H. Flower discovered in, and extracted from, the specimen lately cast upon the coast of Sussex, a small cartilaginous nodule which is the representative of the femur.

The myology of the whalebone whales is quite unknown. The alimentary canal offers many peculiarities. Hunter suspected, from the contour of the jaw, that the upper lip was very large; but it is the lower lip which, in some jaws, attains such large dimensions. Between the widely spread rami is the large and flat tongue. In feeding the whale takes a great mouthful of water, and then, expressing the fluid through the baleen plates on each side of the mouth, swallows such small animals as may be left behind. These baleen plates number some 600 on each side of the mouth. They depend from the roof in a close series, with their edges outwards and inwards, the inner margins being fringed with a quantity of coarse fibres, which together act as a very efficient strainer. Each plate has a groove along its base, in which are the openings of many tubuli, which extend through the plates and along the axes of the hair-like processes. Towards the base of the plate these tubuli contain vascular papillæ, continued up from the mucous membrane beneath. These numerous hair-like processes and tubuli are enclosed by a cortical layer, the wearing away of which was imagined by Hunter to produce the hair-like fringes; but it is not so, the ultimate structure being the result of growth exclusively. It is impossible to compare this baleen with the plates of the dugong without being struck with the very great resemblance between the two parts; but there is yet another remarkable similarity between these animals, inasmuch as the half-grown fœtus of the whale is destitute of baleen, but has a series of teeth developed in the dental groove. They are very minute, not even equalling in development those of the *Sirenia*. Later, the rudimentary teeth are absorbed, the dental groove becomes obliterated, and the baleen begins to appear. Unlike the *Sirenia*, the *Cetacea* are destitute of salivary glands. The stomach is always complex (in spite of the carnivorous habits of the order), there being three distinct compartments. The intestine has also a well-developed cæcum; but the liver is without a gall-bladder. The heart, though broad, is undivided. Hunter has well described the remarkable plexuses formed by the various vessels, which are as abundant as in the manatee, or even still more so. The larynx is peculiar, yet the respiratory modifications have not, in this form, attained their maximum of adaptation. The cricoid cartilage is imperfect, being replaced by membrane in front; on the other hand, the arytenoid cartilages meet together anteriorly. Between the thyroid and cricoid cartilages a laryngeal sac projects outwards: its function is quite unknown. The lower part of the cricoid cartilage is united to the first ring of the trachea, and the rings of that tube run one into another. The trachea and bronchi are short, and there is a third and short bronchus, as in ruminants, with which group we have thus found several remarkable points of resemblance.

WORKHOUSE INFIRMARIES.

THE Association for the Improvement of the Infirmaries of Workhouses held a public meeting at Willis's Rooms on Saturday last, the Earl of Carnarvon in the chair. There was a very full attendance of noblemen, members of Parliament, gentlemen of the medical and clerical professions, guardians of the poor, and the general public.

Among those present were the Archbishop of York, the Duke of Marlborough, Lord Grosvenor, Lord Airlie, Lord Harrowby, Lord Charles Bruce, Lord Burghley, M.P., Mr. E. Potter, M.P., Lord Sandon, Lord Joscelyn Percy, Lord William Hay, Sir James Kay-Shuttleworth, Sir Percy Burrell, Lord H. Scott, Sir F. Goldsmid, Lord Feversham, Dr. Ogle, Dr. Rickards, Dr. Dickson, the Rev. H. Brooks, Lieutenant-Colonel Corrie, Rev. T. O. Reay, Rev. F. D. Maurice, Dr. Watson, &c.

Several letters of apology for inability to attend the meeting were read by the Hon. Secretary, Mr. Ernest Hart; amongst others, from Mr. Charles Dickens and Mr. Stuart Mill.

The Archbishop of YORK proposed the first resolution:—"That the present management of the sick in the metropolitan workhouse infirmaries is highly unsatisfactory; that the buildings are inadequate and unhealthy, the medical attendance in-

sufficient, the nursing merely nominal, and the general system of administration radically defective."

Mr. T. HUGHES, M.P., seconded the resolution, and expressed his hearty concurrence in all that had been said by his Grace the Archbishop of York. A grievous and cruel wrong had been suffered to grow up among them, and he rejoiced at meeting so many who, like himself, were resolved to put an end to it.

Mr. G. BROOKE, one of the Guardians of the City of London Union, supported the views of the Association, and wished that the whole Poor-law system might be revolutionised.

The resolution was then carried with one dissentient only.

Mr. ERNEST HART moved:—"That, with a view to the humane and efficient treatment of the sick paupers, it is desirable to consolidate the infirmaries of the metropolitan workhouses, to support them by a general metropolitan rate, and to place them under uniform management in connexion with the Poor-law Board." He mentioned several cases showing the inefficient management of workhouse infirmaries, and said the best way of meeting the difficulty was by establishing six district hospitals, each capable of accommodating 1000 patients, to be supported by a general rate, and that the guardians of each district should nominate among themselves two representatives to constitute the government of the hospital, and a certain number of paid inspectors should be nominated by the Poor-law Board to assist the governing body in their deliberations.

Mr. W. H. SMITH seconded the resolution, and stated that apart from all higher considerations of humanity and Christian duty, it was incumbent upon the meeting, on the mere ground of economy, to give every support to a movement so well calculated to promote the comfort and happiness of the poor. As a large employer of labour, he felt it would be advantageous to himself and others who, with him, were engaged in large business pursuits, to restore the sick poor to health as speedily as possible.

Mr. DAVENPORT BROMLEY, M.P., then moved:—"That in order to give effect to the foregoing resolutions, it is necessary that immediate steps should be taken to introduce a fitting measure in the House of Commons, and that a deputation be appointed to wait on the President of the Poor-law Board to ascertain whether he will be willing to bring in a Bill for the purpose." And, "That, in the event of the President of the Poor-law Board declining to take charge of this question, the committee of this association is requested to take independent means to bring forward an appropriate measure in Parliament during the present session."

Sir J. KAY SHUTTLEWORTH seconded the resolution, and said he had much experience from his former official connexion with the administration of the Poor Law in the city of London, and his conviction was that the guardians were not wholly responsible for the evils which existed. He had every confidence in the good feeling of the guardians, and believed that when the matter was fairly brought under their notice they would give their support to what he considered an excellent plan, and one well adapted to remedy the evils complained of.

The resolution was agreed to, and a vote of thanks to the chairman brought the proceedings to a close.

Correspondence.

"Audi alteram partem."

ON THE DISCOVERY OF TRICHINA.

To the Editor of THE LANCET.

SIR,—Dr. Cobbold, in his very extended history of the discovery of the Trichina spiralis, has implied that some facts not made public are in the Transactions of the Abernethian Society of St. Bartholomew's Hospital, and he says, "The present office-bearers of the Abernethian Society may, even at this late period, think it worth their while to make more fully known some of the 'missing links' in the chain of evidence." But perhaps I had better do so, from the clear recollection that both my brother (Dr. Paget) and myself have of them, and from papers and letters now before me.

The man in whom the trichina was first observed died at the hospital on January 30th, 1835. Three days later the dissection of the body was commenced. The report soon ran through the dissecting-rooms that there was another body with spiculæ of bone in the muscles. Examining some of these "spiculæ" with a lens, I soon found that they were cysts, and almost directly afterwards ascertained that nearly every cyst contained a small worm coiled up. I was anxious to observe them with a microscope, and, possessing none, I applied to the only man of science whom I at that time knew in London, Mr. Children, principal keeper of the Natural History collection at the British Museum. He, I think, had no microscope, and he therefore took me to Mr. Robert Brown; and I shall not soon forget the feeling approaching to awe when I went to one whom I had long looked upon as the first physiological botanist of his time. I remember that, when Mr. Children entered his room, he said, "Brown, do you know anything about intestinal worms?" and the answer was, "No, thank heaven—nothing whatever." Mr. Brown at once lent me his simple dissecting microscope, with which I soon observed structures in the worm which were before invisible. He himself dexterously pulled a worm from a cyst, and I believe I still possess my sketch of it. As soon as the discovery of the entozoon was made known in our dissecting-room, portions of muscles were distributed far and wide, and among those to whom they were first carried was Mr. Owen.

I was invited, as the discoverer of the entozoon, to communicate the facts respecting it to the Abernethian Society, and I did so on Feb. 6th, the chair being occupied by Dr. Arthur Farre, who had himself investigated the structures of the worm with great accuracy. An abstract of my communication is in the second volume of the Abernethian Society's Transactions. It contains a description of the entozoon—not indeed complete, but I believe not inaccurate, except in a blundering endeavour to assign its zoological relations. I proposed immediately afterwards, on the recommendation of Mr. Stanley, to send a description of it to the *Medical Gazette*, but from this I was dissuaded; and the admirable memoir of Professor Owen, much more complete and exact in zoological detail than anything I could have written, was communicated to the Zoological Society on Feb. 24th.

I am, Sir, yours faithfully,

JAMES PAGET.

Harrwood-place, Hanover-square, March 5th, 1866.

To the Editor of THE LANCET.

SIR,—I am under a promise to Dr. Cobbold to acknowledge the accuracy of any statement which he might make in your columns respecting the discovery of trichina, and I therefore now congratulate him on his lucid exposition of the whole subject. I cannot, however, acknowledge that I have done either him or Tiedemann an injustice (which I promised to admit should he clearly prove his case), since Dr. Cobbold's communication to you is simply an expansion of the views which I have always maintained.

I am also forced, much against my inclination, to write to you on a subject which you have now determinately settled; but Dr. Cobbold has commented upon two letters of mine which appeared in *The Times*, and which not being before your readers, they may express surprise (as some have already done to me) as to what Dr. Cobbold means by the "barely polite" language which those letters contain. Had these been published in your journal they would speak for themselves, and I would have said no more; but as this is not the case, will you allow me to explain? It is a matter of great surprise to me how, in a simple scientific controversy, Dr. Cobbold has allowed himself to show symptoms of vexation, and speak of my letters in the way he has done. I am ignorant of having used a single word devoid of truth, or which ought to give annoyance to him or anyone else. He thinks I have done him and Tiedemann an injustice, and is displeased at the use of two expressions which from their very triviality show how little he can urge against the spirit of my letters. I said that he might find fifty writers who had possibly seen with their naked eye the trichina-capsule, but without any suspicion of its true nature. Dr. Cobbold must surely be aware that the term *fifty*, upon which he so much dwells and italicises, is a mere figure of speech, and that if I had said a "dozen" or a "hundred" my meaning would have been the same. He also takes exception to the term *flimsy*, as used by me respecting the value of Tiedemann's claims. I admit it to be a not very elegant expression, and perhaps "barely polite;" but how far it is wide of the truth your readers can best judge by a reference to Dr. Cobbold's matured opinion respecting Tiedemann.

He says, "Henle, Diesing, Küchenmeister, Davaine, and Thudichum have pointed to a notice by Tiedemann as probably or possibly indicating a prior observation of the specks. Leuckart rejects the evidence. Pagenstecher appears to be in doubt as to the nature of the bodies in question. I entertain a persuasion that they were calcified trichina-capsules."*

I am sorry therefore to perceive that Dr. Cobbold's article savours of anything like antagonism to me, seeing how much we are now in accord; for I consider that if anything like a personality can have issued out of this scientific discussion, I am the aggrieved party, since my letters to *The Times* contained the substance of Dr. Cobbold's present statements and of your own admirable summary of the whole matter. You say in your annotation, "There would seem to be little room for controversy on such a subject. The priority of the English observers is indeed undoubted." I said no more than this; whereas Dr. Cobbold's letter misled the public into the belief that it was a German discovery. Although, therefore, I beg to acknowledge the value and truth of Dr. Cobbold's present communication, he might have saved me this trouble by anticipating me as to our mutual agreement, and admitting that my statements to the English public were altogether correct.

I am, Sir, your obedient servant,

St. Thomas-street, Southwark, March 3rd, 1866. SAMUEL WILKS.

To the Editor of THE LANCET.

SIR,—In a foot-note appended to the excellent and well-nigh exhaustive paper "On the Discovery of the Trichina Spiralis," published in the columns of your journal last week by Dr. Cobbold, the author states that he never entertained a doubt that Mr. Paget first ascertained the existence of the worm, and that he has "been assured that Mr. Paget communicated this discovery to the Abernethian Society, at St. Bartholomew's Hospital, before Professor Owen's paper was read at the Zoological Society;" and he adds, "The present office-bearers of the Abernethian Society may, even at this late period, think it worth their while to make more fully known some of the 'missing links' in the chain of evidence."

We beg the favour of your inserting the following extract from the Minute-book† of the Society, as it supplies the "missing link" in question:—

"At a general meeting of the Abernethian Society, held on Friday evening, Feb. 6th, 1835, Dr. Arthur Farre in the chair ..... Mr. James Paget" (then a first-year's student) "favoured the Society by laying before it some drawings of a peculiar species of Entozoon occurring in the Human Muscles. The patient from whom it had been taken was an Italian, who had died in one of Dr. Roupell's wards. ..... When the body was dissected, ... there were observed, thickly scattered over the muscles, minute whitish specks, which were on examination found to be small vesicles, each containing a worm coiled up..... When removed from its cell, the worm was found to be thread-shaped, blunt at both ends, tapering slightly towards that which appeared to be the head. Its coats were perfectly transparent, and through them could be seen two lines, running along the axis of the body, as if marking the outline of the intestinal canal; while, crossing the space included between them, were four or five transverse lines, apparently caused by its contractions."

Mr. Paget in the same paper alludes to the existence of hooklets with which the (male) worm is furnished; and also states that there can be little doubt that the appearances described by Mr. Hilton in the *Medical Gazette*, 1833, were owing to the occurrence of this worm; and he observes that this species of worm differs essentially from the genus Cysticercus, the latter having far more complex structures, and being altogether different in its general characters. Thus the discovery and description of the trichina were communicated to the Abernethian Society eighteen days before Professor Owen's paper was read at the Zoological Society.

Apologizing for trespassing on your space, we beg to subscribe ourselves, Sir, yours obediently,

TWO FORMER PRESIDENTS OF THE ABERNETHIAN SOCIETY.

St. Bartholomew's Hospital, March 7th, 1866.

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* It is only fair to Dr. Cobbold to say that Dr. Aitken shares in his opinion as to Tiedemann being the first to see the trichina.

† Trans. of the Abernethian Society, vol. ii. (now in the hospital library.)

TREATMENT OF DISEASE BY OXYGEN.

To the Editor of THE LANCET.

SIR,—It may be interesting to your readers to have the results of some experiments which I have been carrying out at St. Thomas's Hospital, on the application of oxygen as a remedial agent in the treatment of disease.

I had remarked that the effect of the Turkish bath in cases of gout was not so satisfactory as in cases of rheumatism, though I must admit that in many great relief was given by it. The acute paroxysms were relieved for a time, but I could not but remark that the lithates continued to abound in the urine, and not unfrequently in greater excess. This may be accounted for by the diminished quantity of the secretion. This lithic acid condition of urine appears to me to be more prevalent in cases where, from lung-disease or from vitiated atmosphere, the respiratory functions were imperfect, as well as in cases of degenerating tissue, abscesses, and fevers.

Lithic acid does not appear in the cutaneous excretion of the Turkish bath, even where it is known to abound in the blood, and it occurred to me that the formation of urea, instead of uric or lithic acid, might be determined by supplying oxygen.

The idea of inhaling oxygen was mooted by Sir Humphry Davy and by Dr. Eddoes in the year 1804, but not adopted generally, probably from the difficulty of obtaining the gas in sufficient quantity and purity. This difficulty has now been happily overcome, and the means of procuring it in a portable form is afforded us by Mr. Barthe, of Long-acre, and also by Messrs. Garden and Robbins, of Oxford-street, by the manufacture of the oxygen water by the former, and of the binoxide of hydrogen by the latter. For the method of obtaining this latter preparation in its present perfection I believe we are indebted to Dr. Richardson.

Till I could obtain an instrument for inhalation in the hospital, I commenced with the use of the two latter remedies. The binoxide of hydrogen I exhibited in one-drachm doses, diluted in about two ounces of water, and in many cases I found it to have a marked influence on the biliary secretion, of which it increased the quantity and improved the quality, often producing excessive biliary dejections, and thus relieving congested livers and secondary bronchial congestion. I procured a large vulcanite bag with a tube, stop-cock, and mouth-piece, which was filled with a mixture of oxygen and air in the proportion of one to four. The gas is inhaled by the patient, and expired into the atmosphere. The result has been pretty uniformly to clear the urine, and in many cases of chronic gout the continued use for half an hour daily, very slowly inspired at intervals, filling the lungs as much as possible, has given very great relief, and in some cases cures have resulted.

I have adopted this plan without the use of any medicine or other appliance which might complicate the treatment; but latterly I have found, in carefully selected cases, the Turkish bath a great expeditor of the absorption of enlarged joints, and that in cases where the Turkish bath alone had previously failed.

There are, however, two cases that are particularly deserving attention. The first was that of a married woman admitted under my care in August with phagedenic (and as I thought syphilitic) ulceration of the soft palate. A large opening existed between the mouth and nostrils, so that she could not swallow fluids but with the greatest difficulty. The sides of the ulcerated and divided palate were swollen and purple, and the edges everted, and secreting an unhealthy pus and ichor. There was no history of syphilis. Aware of the benefit in those cases of the inhalation of the fumes of peroxide of mercury when thrown on plates of hot iron, also that mercury in any other form is usually injurious, and considering that such fumes were those of metallic mercury and oxygen, and having the oxygen bag at hand, I caused her to use it twice daily. The result was a very rapid improvement, and in the course of three weeks she left my care, still with a divided soft palate and loss of uvula, but the edges of the opening were perfectly healed and the throat healthy. I may remark that no other remedy was used. The result was beyond my expectation, and I determined to try it in the next case of phagedenic ulceration that should present itself.

This opportunity soon occurred in the case of John M——, aged twenty-eight, admitted on the 28th of November, 1865. The patient had several large ulcers on rose-coloured and swollen bases—covered with brown crusts in the centre, with elevated and everted edges, from which was secreted an unhealthy ichorous discharge—one large one on the vertex,

another on the forehead, two on the left shoulder, with many cicatrices, the marks of former sores, and his forehead much disfigured. But he was also suffering from double pneumonia, coughing up quantities of rust-coloured and viscid mucus; the bases of both lungs solid, and crepitations over the other parts of the chest where the air entered; great dyspnœa. The smell of the patient was so offensive that he had to be removed to a separate room, and it required some effort to approach him for examination. The course adopted was to remove, if possible, the stench, for which purpose we used the solution of chloride of lead, formed by mixing solutions of nitrate of lead with common salt (by far the best and cheapest deodoriser, and long in use in our wards). His mouth was washed with a solution of Condy's ozone water constantly. He took one drachm of binoxide of hydrogen in two ounces of water three times daily, and inhaled from the oxygen bag twice daily. I employed no other remedy, but ordered wine and brandy, and anything he could be induced to eat. This was on the 29th of November. My next visit was on the 2nd of December, when I hardly expected to find him alive, but I found him sitting up in bed, and very cheerful. The lungs had recovered themselves. He took his food with a good appetite. No smell whatever about him, and the ulcers had all assumed a healthy character. He continued these remedies, and no other, till he left the hospital on the 27th of December, the scabs only being removed by poultices, and the sores then dressed with simple dressing.

I hope soon to have other cases to report. They may not be so successful, but as these two have been so very satisfactory I think my professional brethren may wish to have the opportunity of trying these remedies in similar cases, where hitherto we have experienced so much difficulty and disappointment in their management.

I am, Sir, your obedient servant,
R. H. GOOLDEN, M.D. Oxon., F.R.C.P.

Sussex-gardens, Hyde-Park, Feb. 1866.

A NEW UTERINE DILATOR.

To the Editor of THE LANCET.

SIR,—In your number of the 3rd inst. is a description of a uterine dilator for the internal os. The part of that instrument which is new is identical with that constructed by me for Dr. Marion Sims, at his suggestion, for dilating the *internal os*, and was exhibited at the last annual *conversazione* of the Harveian Society.

I am, Sir, your obedient servant,
Oxford-street, March, 1866. J. F. PRATT.

EDINBURGH.

(FROM OUR OWN CORRESPONDENT.)

THE sanitary state of the city continues to occupy much attention, not only among the civic authorities, but also the inhabitants generally. As soon as the present Lord Provost Chambers took office he submitted to the Town Council a scheme for the improvement of the city, which he calculates will very materially reduce the death-rate of certain parts of the Old Town. In the Report on the Sanitary State of Edinburgh, by Dr. Littlejohn, to which your correspondent has more than once alluded, a similar scheme was suggested; but his Lordship has taken up the idea and amplified it. He now proposes, not only to carry out the improvements in the parts of the town suggested by the officer of health, but to make alterations in various other parts of the Old Town. Dr. Littlejohn's suggestion is, that "by simply piercing the closes with an airy street you let in light, ventilation, and the scavenger," —three admissions very much needed, especially in that part of the Old Town which lies between the High-street and Cowgate. Here it was the medical officer of health suggested that a street should be made, to intersect a district containing a population of no less than 646 persons to the acre. The benefit to the whole community arising from the opening-up of these "cabined, cribbed, confined" neighbourhoods is manifest; but your correspondent cannot believe that it is the only thing needed to reduce the death-rate to the extent stated by the Lord Provost. There are other matters to be considered besides the improvement of the dwellings of the class of people who live in these closes. There is the necessity for better food, elevation in the habits of the people, and that they come to know that intemperance engenders physical as well as moral degradation. There is also a very peculiar distaste amongst many of the inhabitants of that part of the city to the use of water; and, singularly enough, so consistent are they that whilst not using it for themselves, they do not waste it on their children. Of course it is alleged that if better house-accommodation be provided, better habits will be formed—a view which your correspondent would wish to believe, but, from observation of the lowest classes here, is not prepared to give his unconditional assent to as yet. A more serious difficulty than one of mere theory has, however, to be got over: it is the old one of how the cost of these improvements is to be paid. At present, and it appears likely for several years to come, the owners of property in the New Town are, and will be, assessed one shilling in the pound of rental for the drainage of the north part of the city. They urged, when this tax was imposed, that as the benefit which would arise would not be confined to the portion drained, but would extend to the whole of the citizens, the rate ought to be imposed over all the city. This was objected to, and the rate was confined to those parts draining into the water of Leith sewer. For the new sanitary scheme it is proposed to raise the necessary funds by a tax over all the city; and of course those who objected to the one rate being localised will equally object to the other being made general. The necessity for improvement, however, is too manifest; and it will be greatly to be regretted if factious opposition be made to all of the plans at present under consideration for the sanitary improvement of Edinburgh.

In a former letter reference was made to the necessity for a new medical hospital being built in place of the old Infirmary. The managers have lately been hearing evidence as to the best site for the new building. Some of our sanitary improvers, who apparently think that all old things are wrong, are desirous of removing the Infirmary to a more eligible situation; but it seems likely, from the evidence of the professional men connected with that institution, that the new hospital will be built on the site of the old. The position is not unhealthy, it is very convenient for the physicians and surgeons, and, being close to our medical schools, has many advantages for the students. Another reason against its removal to a distance from its present position is that either the surgical and medical hospitals must be separated, or that the new building must contain a new surgical as well as a new medical house. In either case a large and uncalled-for expense would be entailed. Were the houses forming the street between the Infirmary and the University bought up by the managers, and a handsome building facing South Bridge-street erected, a very great improvement would be effected in the appearance of this part of the city, if not in the healthiness of the Infirmary site.

At the *conversazione* of the Royal College of Surgeons on Friday evening, the 23rd of February, a lecture was delivered by Dr. G. W. Balfour "On the Nature of Disease as explanatory of the Success attending various Modes of Treatment." A great part of the lecture, however, has already appeared in your columns (in November).

At this season the annual meetings of our various medical charities are held, and two of these are worthy of the consideration of your readers. That held first was the yearly meeting of the friends and directors of the Royal Edinburgh Hospital for Sick Children. This is a very useful institution. It is doing much good amongst the sick poor, and it must be gratifying to the medical officers of that institution to find their labours appreciated. In the report it is stated that the numbers treated in the hospital have been during the last year 497; in the dispensary department 4348 cases were treated, and 712 were visited at their homes; the general total being 5557 during the year. The usefulness of such an institution does not end in the mere treatment of the individual case, but it must surely in time exercise some perceptible influence in checking infant mortality, not by curing disease alone, but by preventing it; for it is scarcely to be supposed that the instruction given to mothers in the management of their children can be entirely without good effect in teaching them to attend to the little illnesses of children, to be more careful in dieting them, and to pay more regard to systematic cleanliness; and from the check which such an institution gives to carelessness, it is to be expected that infant mortality will be lessened by it very materially. The funds of this hospital are not what they ought to be, and an attempt is being made to pay off a debt of £900 still remaining on the building. An effort is being made to establish a Children's Hospital in Glasgow, but it is opposed by the directors of the Royal In-

firmary. The other annual meeting referred to was that of the Scottish National Institution for the education of imbecile youth. The institution has now forty inmates, of whom thirty-four are more or less educable. This useful hospital, situated at Tarbert, has not been many years established, but under its excellent superintendent, Dr. Brodie, it is making good progress, and gratifying success is being made in the physical, mental, and moral education of its interesting and pitiable inhabitants. Of its forty inmates, eighteen are girls, and twenty-two boys; thirty-four of these cases attend school, twelve of them are at reading lessons in various grades, fifteen at alphabet and speaking lessons, ten at writing, twenty-four at writing on the slate, four at arithmetic, twenty-six at singing lessons, ten are at sewing and knitting, thirty-two at gymnastic exercises, and eight are being trained to usefulness in household duties. Two of the boys have been put to the trade of shoemaking with encouraging results. The elder boys are exercised in the wright's shop, and others are employed in field and garden duties. It is satisfactory to find that the funds of this institution are well supported. Were the building larger, a greater number of free cases could be admitted, but at present this cannot be done without lessening the number of payment cases, and this is considered by the directors to be most inadvisable. No one can have seen the good results produced on imbecile children by judicious treatment without most heartily wishing this excellent establishment God speed.

Parliamentary Intelligence.

HOUSE OF LORDS.

MARCH 1ST.

RAILWAYS IN THE METROPOLIS.

THE Earl of CARNARVON directed attention to the number of Bills which were now before Parliament affecting railway communication in the metropolis, and inquired what course the Government intended to take in reference to them.

Earl RUSSELL said the President of the Board of Trade intended shortly to bring in a Bill which would deal with this question among others.

MARCH 5TH.

THE CATTLE DISEASES PREVENTION ACT.

The Duke of BUCKINGHAM called attention to the fact that the police were unable in certain districts to comprehend the provisions of the Cattle Plague Bill.

Earl GRANVILLE was understood to say that attention would be directed to the subject.

THE CATTLE PLAGUE BILL.

Earl GRANVILLE stated, as several alterations had been made in the Cattle Plague Bill, he wished to inform their Lordships that these would be printed before they went into committee of the whole House. But in order to avoid any further loss of time he proposed that their Lordships should go into committee on Thursday, and that the standing orders should then be suspended in order that the Bill might be carried through all its stages that day.

MARCH 6TH.

THE CATTLE DISEASE.

Earl GRANVILLE read a report from Professor Simonds of some experiments with Mr. Worms's mode of cure that had been made on Baron Rothschild's cattle, at Mentmore, and from which he said he was sorry it appeared that these experiments were comparatively a failure.

HOUSE OF COMMONS.

MARCH 1ST.

THE DWELLINGS OF THE WORKING CLASSES IN THE METROPOLIS.

Mr. T. HUGHES postponed for a week his motion relative to the adoption by the House of certain standing orders with reference to the removal of the dwellings of the working classes in the metropolis in connexion with the construction of railways and public buildings.

MARCH 3RD.

THE CATTLE PLAGUE.

Mr. WALDEGRAVE-LESLIE moved an address for a return of the number of cattle slaughtered in each county and borough in England in obedience to the directions of cattle inspectors, acting under the order of the Privy Council of the 26th day of August, 1865, between that date and the 23rd day of November, 1865, when the said order was revoked; a similar return for each county and borough in Wales; and a similar return for each county and borough in Scotland.

Agreed to.

MARCH 5TH.

EMPLOYMENT OF CHILDREN IN MINES.

Mr. AKROYD asked the Secretary of State for the Home Department whether his attention had been called to the case of a girl, twelve years of age, crushed to death in a colliery near Wigan, and to the evidence given at the inquest; and whether the girl was employed contrary to the provisions of the Act for the regulation of employment in mines.

Sir G. GREY said attention had been called to the case by Lord Shaftesbury, and the Government had sent down Mr. Hickson, an inspector, who had made an elaborate report on the case. It appeared that the girl's employment was not against the provisions of the Act, but the employment of a child of such tender years was, in his opinion, very reprehensible.

MARCH 6TH.

COMMONS NEAR THE METROPOLIS.

Mr. COWPER gave notice of his intention to move for leave to bring in a Bill with respect to the commons in the neighbourhood of the metropolis. (Hear, hear.)

Mr. HIBBERT moved for leave to bring in a Bill to permit capital punishment to be carried out in the interior of prisons. Rather an interesting debate followed, in the course of which Sir G. Grey, while declining to oppose the Bill, suggested that it would be better to wait until the Government Bill on the subject was brought in. He intimated pretty distinctly that the Government Bill would contain provisions to carry into effect the proposals of Mr. Hibbert's Bill. Leave was given to introduce the measure.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 1st inst.:—

Body, Henry M., Cheriton-Fitzpaine, Devon.
Dalley, Charles Thomas, Leicester.
Fennings, Allen, St. Ann's-road, Notting-hill.
Rogers, George Arthur, Queen-square.
Smith, William, Gorton, near Manchester.
Verity, Abraham Robert, Bridgend, Glamorganshire.

The following gentlemen also on the same day passed their first examination:—

Adams, George E. D'Arcy, King's College.
Wilkins, John Canning, University College.

DR. J. BRAXTON HICKS, F.R.S., has been elected Honorary Fellow of the Berlin Obstetrical Society.

THE LONDON SURGICAL HOME.—His Royal Highness the Prince of Wales and her Royal Highness the Princess of Wales have sent twenty-five guineas each to this institution.

THE MEDICAL SERVICE OF THE NAVY.—£57,368 have been voted by the House of Commons for medical establishments at home and abroad.

ROYAL SOCIETY OF NORTHERN ANTIQUARIES.—At a meeting of this Society held last week at Copenhagen, his Royal Highness Albert Edward, Prince of Wales, K.G., was unanimously elected a co-founder in the room of his father.

AT Trowbridge, in Wiltshire, a disease has broken out amongst the fowls. "They are affected with spasms, a yellowish mucus runs from their beaks, and their combs turn black."

A PHYSICIAN CHARGED WITH POISONING HIS PATIENT.—A Greek physician has been taken before the authorities at Guinwrdgina, Salonica, on the charge of having administered poison to a merchant in the shape of pills.

SURGERY IN CHATHAM DOCKYARD.—The new and more commodious surgery, which has been in course of erection in Chatham dockyard for some time past, is now approaching completion; all the external work has been accomplished, and only the internal fittings have to be completed.

VOTES OF CENSURE UPON MEDICAL PRACTITIONERS IN THE CORONER'S COURT.—At a numerously attended meeting of the Islington Medical Society, specially convened to consider the subject, the following resolutions were carried unanimously:—

1. "That it is the opinion of this meeting that when a charge is made against a medical man before the coroner, it is unjust that a vote of censure should be passed by the jury without the accused having an opportunity of defending himself. It is, therefore, a matter of regret that the Coroner for Central Middlesex should not have borne this principle in mind in certain recent cases.

2. "That the preceding resolution be published in the following medical journals:—THE LANCET, *Medical Times and Gazette*, and *British Medical Journal*."

Signed on behalf of the meeting,

Islington, March 6th, 1866. W. B. KESTEVEN, *Chairman*.

ROYAL VETERINARY COLLEGE: TESTIMONIAL TO MR. TUSON.—On the 28th ult. a meeting was held at the College by the pupils of veterinary surgery to present Mr. R. V. Tuson, the teacher of Chemistry, with a testimonial "as evidence of their esteem for him, as well as a slight recognition of the able and energetic manner in which he had laboured in their behalf, and of his uniformly kind and gentlemanly bearing towards them." The presentation consisted of an address and one of Smith and Beck's binocular microscopes with numerous appliances.

CHARING-CROSS HOSPITAL.—We understand that Dr. Willshire is likely to resign in June next the office of Senior Assistant-Physician, which he at present holds in this hospital. In that case Dr. Frederick Headland will occupy his place, and the vacancy thus created will have to be filled up. Dr. Julius Pollock and Dr. Tilbury Fox are spoken of as likely to become candidates for the post.

PRESERVED MEAT.—On Thursday last several gentlemen, among whom were Mr. Dowling, of the War Office, Mr. Tyrone Power, of the Commissariat Department, and Mr. Scott Robinson, purveyor, met at Messrs. Keeling and Hunt's sale-room, Monument-yard, to test the quality of some preserved meat which had been imported from Australia. The result of the investigation was satisfactory.

MAGDALEN COLLEGE, OXFORD.—There will be an election at this college in April next to a Demyship in Natural Science of the value (room-rent and tuition included) of £75 per annum, and tenable for five years from the day of election. The examination will commence on April 17th. Particulars relating to the examination may be obtained by applying to the president or senior tutor.

LUNATICS.—On Saturday last, Richard Harris and John Aires were indicted for illegally receiving a lunatic into their respective houses for profit without a licence. It was proved that they had acted in ignorance of the law, and the judge discharged them upon their own recognizances to come up for judgment when called upon.

THE CHOLERA AT JERUSALEM.—During the raging of the epidemic in the holy city, the British Consul and the majority of his foreign colleagues remained at their posts, and, forming themselves into a sanitary committee, did as much as they could to alleviate the sufferers attacked.

REGISTRATION OF DEATHS IN SCOTLAND.—On Tuesday week last, a numerously attended meeting of the Glasgow Medical Association was held at the Trades'-hall, at which it was proposed to present a memorial to the Royal College of Physicians, Edinburgh, and another to the College of Surgeons, urging a reconstruction of the Registration Act, as far as it deals with professional status and rights.

THE WATER-SUPPLY OF THE METROPOLIS.—A meeting was held a few days ago, at which Lord Ingestre presided, when attention was directed to the filtering apparatus which the London and General Water Purifying Company supply, and which Government has recently adopted in two or three instances with complete success.

MAURITIUS.—Under a new ordinance just passed for regulating medical attendance and hospitals on estates in this island, Mr. C. F. Edwards, the Sanitary Inspector-General, has been appointed in addition Medical Inspector-General. It is gratifying to observe that real merit and good service are meeting with just recognition at the hands of the Colonial Office. During the Crimean war, Mr. Edwards, then one of the surgeons attached to Omar Pasha's army, distinguished himself greatly in the field. At the battle of the Ingour, in Mingrelia, he was engaged for many hours under a heavy fire in attending to the wounded, and received for his services the Order of the Medjidié. His work was not forgotten, and in August, 1856, Mr. Edwards was appointed chief medical officer of the convict establishment at Bermuda, which office he held until the abolition of the establishment in 1863. So satisfactory was his conduct in this difficult post that in August of that year he was transferred to the Mauritius, with the appointment of Sanitary Inspector-General. The post to which he has now been appointed, in addition, is an important one. His duty will be to superintend the medical arrangements of the various estates and to organise hospitals. From his large experience in responsible positions, and great tact in the management of those placed under him, Mr. Edwards is peculiarly well qualified for such a post, and it is a matter of congratulation that the inhabitants of this island have obtained the services of so distinguished an officer.

Obituary.

WILLIAM OWEN LUCAS, ESQ.

DEATH has just closed, at the age of seventy-eight years, the career of a man whose loss will be widely felt. Mr. Lucas breathed his last on Sunday, the 25th ult., at his residence, Taunton-place, Regent's-park, from a sudden attack of epileptiform apoplexy, resulting from albuminuria.

He was suddenly seized in church at the conclusion of the service, and never recovered consciousness. He thus terminated a long career of honourable and exemplary usefulness, and it is consolatory to his friends to reflect that the last act of an upright and unsullied life was that of prayer and thanksgiving. He was a man especially remarkable for his high tone of professional conduct and feeling, and well worthy of the intimacy he enjoyed through life with most of the leading members of our profession in London. His manly and independent character and genial manners, together with a thorough practical knowledge of his profession, secured to him an extensive practice, while in private life he won the esteem of all who knew him. Kind-hearted, generous, and sympathising, he was always to be found foremost where any good was to be done; combining the integrity and courtesy of a gentleman with the kindness and affection of a friend.

MEDICAL VACANCIES.

Surrey County Hospital—Three Honorary Medical and Surgical Officers, and three Honorary Assistant Medical and Surgical Officers.
Taunton and Somerset Hospital—House-Surgeon.
Weobley Union (Dilwyn District)—Medical Officer.

MEDICAL APPOINTMENTS.

W. D. DITCHETT, M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Louth District and the Workhouse of the Louth Union, Lincolnshire, vice H. R. Walker, M.R.C.S.E., whose appointment has expired.

J. G. DUDLEY, M.D., has been appointed an additional Physician to the North London Consumption Hospital, Park-road, Hampstead.

B. G. GRAHAM, M.R.C.S.E., has been elected Medical Officer, Public Vaccinator, and Registrar of Births, &c., for the Edenderry Dispensary District of the Irvinestown Union, Co. Fermanagh, and Medical Officer to the Tubrid School, vice W. Johnston, M.R.C.S.E., deceased.

W. T. GREENE, M.B., has been elected Medical Officer, and Registrar of Births, Marriages, and Deaths, for the Moira Dispensary District of the Lurgan Union, Co. Down, vice J. Macvey, M.R.C.S.E., resigned in consequence of ill-health.

W. J. GRIER, L.R.C.P.Ed., has been elected Medical Officer to the Workhouse and Fever Hospital of the Granard Union, Co. Longford, vice G. Grier, L.R.C.S.I., deceased.

R. W. HENDERSON, M.R.C.S.E., has been appointed Medical Officer for the Rickmansworth District of the Watford Union, Herts, vice H. Lewis, M.R.C.S.E., resigned.

W. A. JAMIESON, M.B., C.M., has been appointed Junior House-Surgeon to the Dispensary, Preston, vice L. Cameron, M.D., resigned.

E. LEEDS, M.B., has been appointed Medical Officer for the 6th and 7th Districts of the Tonbridge Union, vice S. E. Proctor, L.R.C.P.Ed., resigned.

E. MAHONY, M.R.C.S.E., has been elected Resident Junior Surgeon to the St. Pancras Workhouse and Infirmary, vice W. F. Batt, M.R.C.S.E., promoted to Senior Resident Surgeon.

O. C. MAURICE, M.R.C.S.E., has been appointed Assistant-Surgeon to the Royal Berkshire Hospital, Reading.

A. MEADOWS, M.D., has been appointed an additional Physician to the Hospital for Women, Soho-square.

F. L. MILBURN, M.R.C.S.E., has been elected Assistant House-Surgeon to the General Hospital, Nottingham, vice Lethbridge, resigned.

Mr. E. J. MORRIS has been appointed Medical Officer for the Welwyn District and the Workhouse of the Welwyn Union, Herts, vice H. W. Bubb, M.D., resigned.

T. C. NESHAM, M.D., has been elected Surgeon to the Newcastle-upon-Tyne Lying-in Hospital, vice J. Watson, M.R.C.S.E., deceased.

A. NEWMAN, M.B., has been elected Medical Officer for the Dartmouth District of the Totnes Union, vice R. F. Burrough, M.R.C.S.E., resigned.

S. S. RODEN, M.D., has been elected Medical Officer and Public Vaccinator for the Hanbury District of the Droitwich Union, Worcestershire, vice F. A. Cramer, L.R.C.P.Ed., resigned.

S. ROWE, M.R.C.S.E., has been appointed Medical Officer for the 4th District of the Stroud Union, Gloucestershire, vice Turner, resigned.

W. SKINNER, L.R.C.P.L., has been appointed Medical Officer for the North District of the Sheffield Union, vice H. G. Allanson, M.D., deceased.

W. A. SMITH, M.D., has been appointed an additional Physician to the North London Consumption Hospital.

C. SNAPE, M.D., has been elected Medical Officer and Public Vaccinator for the Morchard Bishop District of the Crediton Union, Devon, vice C. Basley, M.R.C.S.E., deceased.

O. STURGES, M.D., has been appointed an additional Physician to the North London Consumption Hospital.

W. L. WHITE, M.B., C.M., has been appointed Assistant Medical Superintendent at the Dundee Royal Infirmary.

E. WRIGHT, L.R.C.P.Ed., has been appointed Medical Officer for the 8th and 9th Districts of the Southwell Union, Nottinghamshire, vice J. W. Lilly, M.R.C.S.E., deceased.

Mr. G. J. YATES has been appointed Assistant Dispenser at the Burlington-street Dispensary, Liverpool, vice Evans, resigned.

C. F. YORKE, L.R.C.S.I., has been appointed Surgeon to the Constabulary, Granard, Co. Longford, vice G. Grier, L.R.C.S.I., deceased.

Births, Marriages, and Deaths.

BIRTHS.

On the 17th ult., at Chandos-street, W.C., the wife of C. S. Watkins, M.R.C.S.E., of a son, still-born.

On the 21st ult., at Worthing, the wife of Dr. Worthington, of a daughter, prematurely.

On the 24th ult., at Stoke Newington, the wife of F. W. A. Rawlins, M.D., of a son.

On the 26th ult., at Fitzroy-square, the wife of H. Madge Madge, M.D., of a son.

On the 3rd inst., at Devonport, the wife of F. C. Annesley, M.R.C.S.E., Deputy Inspector-General of Hospitals Army, of a son.

MARRIAGES.

On the 1st inst., at St. Leonard's-on-Sea, John Taylor, M.R.C.S.E., of Ticehurst, Sussex, to Elizabeth, daughter of H. T. Swann, Esq.

On the 3rd inst., at the Cathedral, Manchester, Frank Holmes, M.R.C.S.E., of Hope Cottage, West Gorton, to Annie Elizabeth, second daughter of the late Henry Arrow, Esq., of Sevenoaks, Kent.

DEATHS.

On the 10th inst., at Victoria House, Torquay, of consumption, William Quarrell, M.R.C.S.E., L.F.P. & S. Glas., aged 25.

On the 27th ult., A. M. M'Whinnie, F.R.C.S.E., late of the Crescent, New Bridge-street, Blackfriars, formerly Assistant-Surgeon at St. Bartholomew's Hospital, aged 58.

On the 1st inst., at Park Hall, near Langton, Staffordshire, S. P. Goddard, M.D.

On the 1st inst., at Islington, Liverpool, Henry Bunbury Watters, L.R.C.P.Ed., M.R.C.S.E., aged 31.

To Correspondents.

M.D., (Aberdare.)—The letter forwarded only adds another to the hundreds of illustrations which are constantly brought to our notice with respect to the inefficiency of the Medical Act. The 40th clause has proved to be valueless as a preventive of quackery or of illegal practice. It is true, as our correspondent asserts, that the Apothecaries Act undoubtedly confers great powers on the Hall in Blackfriars; but the difficulty of proof is often so great that few prosecutions are now instituted.

A Young Student should refer to his text-book on Physiology. We cannot spend time in replying to such simple elementary questions.

THE LATE MR. KEMPSTER.

To the Editor of THE LANCET.

SIR,—Your correspondent in last week's LANCET, with a laudable desire to do justice to the memory of the late Mr. Kempster, states that your report of the honours gained by the deceased is incorrect. As regards the scholarships you were right. It will be found by reference to the London University Calendar that Mr. Kempster gallantly won the Scholarship and Medal in Anatomy and the same in Chemistry at the first M.B.; but the Materia Medica Scholarship was won by Mr. Moxon, Mr. Kempster being 5th. The Midwifery Gold Medal (now Scholarship) is competed for at the second M.B.; but I do not find Mr. Kempster's name in the University College Calendar among those of its students who have passed that examination.

I am not desirous to detract from the merits of so distinguished a student as the late Mr. Kempster; but I am sure, were it possible for him to express a wish, his love of truth would prompt the correction I have offered.

Yours obediently,

March 5th, 1866. AN OLD UNIVERSITY STUDENT.

*** We have received several letters on this subject.

Cystine.—A physician now engaged in some researches in relation to cystine, is anxious to procure a supply of this organic body. Can any of our readers furnish us therewith, under cover to M.D.? Its receipt shall be duly acknowledged.

PARASITIC FUNGI.

To the Editor of THE LANCET.

SIR,—In a letter to THE LANCET (August, 1859), referring to Mr. Hogg's paper on "Parasitic Fungi," published in the seventh volume of the *Microscopical Journal*, I charged Mr. Hogg with appropriating the results of my investigations. To this he, for reasons best known to himself, made no reply. I did not at the time think it worth while to make any further comment on the matter; but since his last paper reiterates the offence, I feel bound to repeat the former charge, and I now challenge him to show that it is not founded on fact, and sufficiently supported by the evidence I shall adduce.

To begin with his last statement. In the *Microscopical Journal*, January, 1866, page 21, is the following foot-note:—"It is only right to say that *I did not follow* Dr. Lowe, as some writers have stated, in this field of inquiry. My observations on skin diseases were commenced at the suggestion of my friend, Mr. Hunt, in 1856, and continued for three years before my first paper appeared in print. At that time (1859) neither Mr. Hunt nor myself had heard of Dr. Lowe's researches, which it appears were communicated to a local Society, and published in the 'Edinburgh Botanical Society's Transactions,' 1857."

The *local Society*, I may remark by the way, was the Botanical Society of Edinburgh.

Mr. Hogg's investigations were begun, he says, in 1856. Mine were begun in the early part of 1856, and published in 1857. The title of the first paper was "On the Identity of Achorion Schönleinii and other Parasites with Aspergillus Glaucus." The experiments on which it was founded were made by developing the fungus of favus in solutions of sugar.

So far by way of explanation.

At page 53, *Microscopical Journal*, vol. vii., 1859, in Mr. Hogg's first paper, is the following statement:—"The spores of the favus fungus germinate in solutions of sugar, but produce only thallus threads; the sporidia are formed when it is exposed to the action of the atmosphere.....The mass of scabs crumbles in distilled water without germinating. The spores do not germinate in blood-serum, or the solution of white of egg, or in animal fats; but this *was speedily effected when sugar was added*, or a solution poured over either of them. These *experiments closely connect and identify these fungi with the vegetable-growing species*, and *from* which they do not appear *to me* to differ in their most essential characteristics."

The parts italicized show the novel investigation; the "*to me*" indicates that it was Mr. Hogg who made that investigation. Well, be it so. Hear, then, an earlier paragraph by the same author, *op. supra cit.*, page 40:—"At the head of my cases I placed *favus*; but this disease is so rarely seen either at the Dispensary for Diseases of the Skin or in private practice, that I have *not been fortunate* enough to *obtain a specimen for examination.*"

If Mr. Hogg had not heard of my paper nor *seen* it, may I ask how he obtained his information, and from what unacknowledged source? Up to the time of Mr. Hogg's paper I do not remember to have seen any published statements of these experiments, save my own. But Mr. Hogg distinctly speaks of "experiments" which he at least implies are his own, and yet, strange to say, he had not been able to obtain a case of favus! Well, if he did not follow me in my experiments, pray whom did he follow? I ask for the sake of information. Perhaps the knowledge was intuitive. Who knows?

Again, hear Mr. Hogg in an addendum to his first paper:—"*Since the paper has been in the hands of the printer*, a most *interesting* case (!) has fallen under my notice, that of a boy who has long been suffering from a *scaly disease*, affecting the whole of the cutaneous surface. In some respects it resembles *favus* (sic), and the crusts, which fall off in immense quantities, resemble the *achorion Schönleinii* (!)—in fact, are wholly composed of torulæ and epithelial scales. A small piece of crust put into sugar-and-water passes through the usual stages of the fermentative process, and gives off carbonic acid. *Any quantity of sweetwort* might be fermented; indeed the *scales* (epithelium?) look like *dried yeast*, proving the *analogy between this fungus and the yeast plant.*"

Surely this after-thought requires no comment. The lines I have italicised will bear and are well worthy of closer investigation than the new and undescribed form of skin disease appears to have received.

I feel, Sir, that I have already expanded this letter sufficiently, more so indeed than I have either time or inclination for; but there are one or two points in Mr. Hogg's last paper which I must ask permission to notice. In speaking of the production of skin disease from fungi, Mr. Hogg (p. 21) has given a most garbled statement of some cases of mine, which *another* reference to my paper would have corrected, and he concludes the foot-note by saying:—"For my own part, so thoroughly satisfied am I of the utter fallacy of such a statement, that I should have no hesitation in submitting my own skin to be experimented upon to test the truth of what I have stated."

We may estimate Mr. Hogg's faith in the resisting power of his own dermal covering when we read on the previous page that he had actually a case in which disease of the scalp and hairs originated from washing the *head with stale beer!*

Mr. Hogg states as a fact of great interest that the vomit from a case of yellow fever sent to him from Bermuda contained abundance of torulæ, &c. Would not any other vomit sent from the same distance contain an equal amount of torulæ?

Mr. Hogg may rest assured that his "small amount of vanity" is not only excused, but explained by such statements as these.

In conclusion, I can only state that every single *fact* narrated by Mr. Hogg as the results of his own experiments had found publicity (sad that it was only *local*) in my own papers two years before his appeared in print, and yet only once does he even acknowledge the existence of your humble servant,

King's Lynn, February, 1866. JOHN LOWE, M.D. Edin.

Taxidermist.—We have found nothing better than a solution of the bichloride of mercury in alcohol for the particular purpose in question. The strength employed has been that of three grains to the drachm.

J. W. C. (Leicester) may obtain the works he requires by order of a bookseller.

ACTION OF DRUGS BY INHALATION.

To the Editor of THE LANCET.

SIR,—Will you allow me to ask your numerous readers if there is any list of the action of drugs by inhalation? or if it is generally the same action as by the stomach? Yours respectfully,

Manchester, February 28th, 1866. M.R.C.P.

Ignotus.—The best weekly medical papers published in Paris are *La Gazette Médicale de Paris* and *La Gazette Hebdomadaire de Médecine et de Chirurgie.* The first costs 36 francs a year in Paris; the second, 24 francs. For London the postage would slightly raise the price. Though these papers are very valuable, we are bound to add that they do not exactly correspondent to THE LANCET, as they are not allowed to discuss political or administrative economy. No paper in France may do this, unless it is stamped, and makes a deposit of a large guarantee sum of money. Mr. Baillière, of 219, Regent-street, receives subscriptions.

Mr. W. Rawlings.—We do not insert such communications in THE LANCET. Our correspondent had better consult his medical attendant.

Mr. G. Miller, (Dunbar.)—The imposition has been exposed in our columns.

POOR-LAW MEDICAL RELIEF AND VACCINATION.

To the Editor of THE LANCET.

SIR,—I shall feel obliged by your allowing me space to inform the Poor-law medical officers that a Bill has been introduced into the House of Commons by Mr. Bruce and Mr. Baring, entitled, "A Bill to Consolidate and Amend the Statutes relating to Vaccination in England."

I wrote to Mr. Bruce a few days since, enclosing a copy of the plan proposed by us in 1861, which will be found in the pamphlet entitled, "Evidence on Poor-law Medical Relief, 1861," page xxii. A few copies of this pamphlet I have still on hand, and shall be happy to send one to any gentleman on the receipt of twelve postage stamps. Mr. Bruce's Bill is a great improvement upon the Acts now in existence, and contains penalties in sufficient abundance; but the rewards to the medical officers stand as they are in the present Acts. The 1*s.* 6*d.* and 2*s.* 6*d.* ought to be altered to 2*s.* 6*d.* and 3*s.* 6*d.* for the first 300 cases vaccinated by an individual medical officer in any one year, and for all above that number the 1*s.* 6*d.* and 2*s.* 6*d.* may remain. The Act expressly provides for the granting of certificates by medical men, whether public vaccinators or not; but there is to be no payment. Thus a medical man may vaccinate a child half a dozen times unsuccessfully, and be compelled to give as many certificates; but he is to have no payment either for vaccination or certificates. I recommend that certificates should be paid for at 6*d.* each, which would give the profession about £13,000 per annum. The Act should be perused by the Poor-law medical officers, who are for the most part public vaccinators. It can be procured through the medium of a bookseller or a M.P. In order, however, to save time, I have drawn up an epitome, which is at your service should you be able to find space for it. I should strongly recommend every public vaccinator to write to his M.P., and endeavour to get some of the clauses amended, particularly those relating to payment; for as they now stand it is not worth the while of a district medical officer in a small and thinly-populated district to take the trouble to carry out the provisions of the Act, and as a consequence small-pox in this kingdom will never be eradicated.

I am, &c.,

12, Royal-terrace, Weymouth, March 3rd, 1866. RICHARD GRIFFIN

List of subscriptions received during the last week for the Poor-law Medical Reform Association:—

By Mr. Griffin:—S. Barrows, South Molton, 5*s.*; J. Hinton, Bath, 10*s.*; T. Boyle, St. Columb Major, 5*s.*; R. Ransom, Cambridge, 10*s.* 6*d.*; G. Cordwent, Taunton, 5*s.*; C. H. Carter, Pewsey, 10*s.* 6*d.*; J. E. Morcton, Great Boughton, 10*s.*; G. D. Brown, Ealing, 5*s.*; H. B. Goold, Portsea Island, 5*s.*; T. B. Simpson, Portsea Island, 5*s.*; R. Fowler, London East, 5*s.*; A. D. Harston, Islington, 5*s.*

By Mr. Prowse, Amersham:—F. F. Jay, Dopwade, 20*s.*; D. de Berdt Hovell, Hackney, 21*s.*; T. S. Hewitt, East Hampstead, 10*s.*; W. R. Hill, Lymington, 5*s.*; E. Chinery, Lymington, 5*s.*; A. Barrett, Freebridge, Lynn, 5*s.*; J. Hutchinson, Prestwich, 10*s.* 6*d.*; C. V. Hitchins, Axbridge, 5*s.*; [R. Roberts, Portmadoc, 10*s.* 6*d.*, instead of "R. Roberts, Festiniog," as appeared in last announcement.]

Epitome of Vaccination Bill, 1861.

Clause 1.—Repeal of former Acts.

Clauses 2 and 3.—Guardians to have power to divide unions or parishes into districts, subject to the approval of Poor-law Board.

Clause 4.—Qualification of public vaccinator to be prescribed by the Lords of her Majesty's Council, who are to make regulations to secure efficient performance of vaccination or the provision and supply of vaccine lymph by public vaccinator.

Clause 5.—For every successful vaccination at an appointed station situated at or within two miles of the residence of the vaccinator, or in the workhouse of the union or parish, not less than 1*s.* 6*d.*; and beyond that distance, not less than 2*s.* 6*d.* (It should be altered to 2*s.* 6*d.* and 3*s.* 6*d.* for the first 300 cases in any one year, and above that number to 1*s.* 6*d.* and 2*s.* 6*d.*—R. G.)

Clause 6.—Conditions may be imposed in contracts to secure the fulfilment of the provisions of this Act on the part of the vaccinator, and guardians shall provide all stations at which the vaccination shall be appointed to be performed other than the surgery or residence of the public vaccinator.

Clause 7.—No payment for revaccination, if previously successfully vaccinated, unless Lords of Council issue regulations on the subject, and then only two-thirds of the fee allowed for primary vaccination.

Clause 8.—Contract not valid unless approved of by the Poor-law Board, and even then may at any time be determined by them.

Clause 9.—No payment to be made unless contract approved of by Poor-law Board.

Clause 10.—No public vaccinator to be paid for vaccination out of his district.

Clause 11.—In districts with scanty population, guardians may provide for the attendance of public vaccinator after intervals exceeding three months. Between the periods parents of child exempt from penalties. (Under this provision, how is the inspection to be made, or the supply of lymph kept up?—R. G.)

Clause 12.—Guardians to give notice of alteration of districts.

Clause 13.—Registrar-General to provide forms.

Clause 14.—Registrar of births to give notice to parent or others where and when a child may be vaccinated.

Clause 15.—Child to be vaccinated within three months after birth, unless death &c. of parent; then four months allowed.

Clause 16.—Child to be taken on the seventh day following vaccination to public vaccinator for inspection; an., if he sees fit, he has power to take from such child lymph. If vaccination has been unsuccessful, vaccinator may direct the child to be forthwith revaccinated.

Clauses 17 and 18 make provision if the child is not fit for vaccination, and the delivery of a certificate by the public vaccinator or medical practitioner, which shall remain in force for two months, and be renewable every two months. (No fee for this.—R. G.)

Clause 19 determines the continuance of the two months' certificates, by saying if a child has been more than once unsuccessfully vaccinated; and if the vaccinator shall find he is insusceptible of vaccination, then a certificate to that effect shall be granted, and the parent shall thenceforth not be required to cause the child to be vaccinated. (No fee for this.—R. G.)

Clause 20 provides for the furnishing of a certificate to be forwarded to the registrar where the birth was registered (if known to him), or else to the registrar of the district where the child was vaccinated, within twenty-one days of its successful vaccination, and duplicate certificate to the parent of the child. (No fee for these.—R. G.)

Clause 21 provides that no fee shall be paid the public vaccinator for these certificates. (This should be reversed.—R. G.)

Clause 22 provides that the parent of the child shall transmit the certificate if the medical practitioner be not a public vaccinator.

Clause 23 provides that the registrar shall keep a book wherein to enter vaccinations, and for every search therein 1*s.* shall be paid, and for every copy 6*d.*; but no fee shall be paid for a search by a public vaccinator or any officer of the guardians authorized by them to make such search, or any inspector appointed by the Poor-law Board or Lords of her Majesty's Council. The registrar shall also receive a fee of 1*d.* for every notice to vaccinate when he registers a birth, and 3*d.* for every certificate of vaccination he shall have registered, and 1*d.* for every certificate of vaccination where he has not registered the birth.

Clause 24.—Registrar to make out in duplicate quarterly accounts, and to be paid fees by boards of guardians.

Clause 25.—Vaccination declared to be not parochial relief.

Clause 26.—Guardians to be paid all reasonable expenses for notices to be printed and circulated, and compensate any officer appointed by them to prosecute persons charged with offences against this Act, or otherwise to enforce its provisions.

Clause 27.—Parents or others neglecting to take child to be vaccinated, or after vaccination to be inspected, or revaccinated, and reinspected, shall be guilty of an offence, and be liable to be proceeded against summarily, and upon conviction to pay a penalty not exceeding 20*s.*

Clause 28.—Vaccinator and parent neglecting to transmit certificate liable to penalty not exceeding 20*s.*; and in the case of false certificates, to be guilty of a misdemeanour, and punishable accordingly.

Clause 29.—Justices may make an order for the vaccination of any child under thirteen years of age within a given time; and if at the expiration of the time the child has not been successfully vaccinated, or is unfit, &c., the parent or other person shall be liable to a penalty not exceeding 20*s.*; and it shall be no answer to the making of such order that he shall have been previously convicted of an offence under this or any other Act relating to vaccination.

Clause 30.—Penalty upon persons inoculating with small-pox.

Clause 31.—Penalty not exceeding £5 for wilfully exposing small-pox patients, or carelessly conveying them in public conveyances.

Clauses 32, 33, 34, 35, relate to the statutes now in force; notices and interpretation, clauses and titles, followed by forms A, B, C, and D, which will require altering, especially the medical titles, which are only M.D., L.A.C., or F.R.C.S.

Mens Conscia Recti.—1. Assuming the facts stated to be correct and complete, a legally qualified practitioner is censurable for meeting A. B. in practice.—2. If he does so, he is bound to state "Died without medical attendance."—3. He should be reported to the Medical Council and Apothecaries' Society.—4. He cannot recover for attendance and medicine.

Ignoramus.—The work of Bucknill and Tuke.

Portsmouth.—Thanks.

Dr. J. Hurd.—Rev. Mr. Cazalet, Southampton-street, Strand.

POLICE ERRORS.

To the Editor of THE LANCET.

SIR,—In a paragraph, headed as above, in your impression of Feb. 24th, upon an inquest held on a man named Thomas Hayward, you say, "The house-surgeon of St. Thomas's Hospital stated that the insensibility was caused by pain. The same remark I have since found was made in *The Times* newspaper the day after the inquest, and from that source I suppose you have derived your information. From the whole report it would appear that through my evidence the Coroner took occasion to censure the police for their treatment of persons found in a state of insensibility.

What I said was to the effect that the man was insensible when brought to the hospital, and was "drunk, very drunk," and I was so understood by Mr. Carter as he read my deposition over to me afterwards.

Possibly a case of bad compound fracture might not be improved by removal to the station by a few policemen; but I think that when a man is disgustingly drunk, as this one was, the remarks of the Coroner were extremely ill-timed and uncalled for. The expiring after much suffering is either a sensational phrase of the penny-a-liner or a mistake of the reporter, from my having stated that there was much suppuration about the seat of injury.

Trusting you will insert this as an act of justice to the divisional surgeon as well as the police, I am, Sir, yours truly,

FREDERIC H. WARD,

February 28th, 1866. House-Surgeon to St. Thomas's Hospital.

George of Kensington.—Previously to the period alluded to, our English medical writers were chiefly known by their Christian names, as Richardus Anglicus, John of Gaddesden, Gulielmus Medicus, John of Ardern, and Alphredus Anglicus. The last named worthy wrote a treatise, "De Motu Cordis," and is mentioned with great respect by Bacon, Leland, and others.

Mr. Mathews.—Most probably.

Look at the Calendar.—Too much has already been written on the subject of this communication.

Artus.—A concentrated form of the compound tincture of iodine.

THE HYPODERMIC OPERATION FOR INJECTING QUININE.

To the Editor of THE LANCET.

SIR,—Will some of your readers kindly inform me as to the mode of performing the hypodermic operation for injecting quinine, the best place to do it, how the fluid is to be prepared, &c.? Yours truly,

March 1st, 1866. A COUNTRY M.D.

STOKE-UPON-TRENT UNION.

We extract the following observations from a local paper. The speaker is the Rev. Sir Lovelace T. Stamer, Rector of Stoke. We think that such remarks are highly to be regretted as proceeding from one occupying so high a position as the reverend gentleman. They are not only uncalled for, but reflect most unjustly upon an underpaid, but highly meritorious class of public officers. Such speeches are calculated to inflict much mischief both upon the Poor-law surgeons and the poor themselves. However, they have an effect in one way very different probably from that which the speaker and his friends imagine. They tend to strengthen the conviction, now generally prevalent, that some decided reform of the Poor-law management generally is absolutely called for. We are no friends to centralization in the main; but it must be confessed that no centralization could be worse than the present system of local government by the guardians of the poor:—

"The Rev. Sir L. T. Stamer, in introducing his motion, observed that he thought it would be better to consider the whole question of salary, both out of regard to the medical officers and out of regard to the poor. Under the present system the medical officers were paid by small fixed salaries, altogether out of proportion to the work they had to do, and extra medical and vaccination fees. The tendency of this was to make medical officers eager to secure as many extra fees as they could get. And this was quite natural; for they all knew very well that if an employer had clerks or others who had small pay, if there was some other allowance of payment for extra work, they would try to do that work. The present system of payment to the medical officers was, he considered, disadvantageous both to the parish and to the poor. In cases in which the medical officer had to decide between a long course of treatment to effect a cure and a capital operation, it was most likely that he would resort to the capital operation rather than have the trouble of the prolonged course of treatment. Then he did not know what check they had upon the medical officers, and he was not aware of any control they had over the expenses under the present mode of payment, and, on that ground, he thought the system was not satisfactory. From a consultation he had had with a gentleman well qualified to give an opinion on such a matter, he fully believed that it would be much better to pay the medical officers by a fixed salary, and not allow any extra fees only in cases of vaccination and midwifery cases; in the latter he thought it would be especially desirable to retain the present system of allowing an extra fee, as the poor would then be more likely to get good attention. If they granted an increased fixed salary to the medical officers, there would even be a reduction of the actual cost to the parish, for there would be a considerable return from the consolidated fund. Sir Lovelace then gave a statement of figures to show how the entire system of payment throughout the parish might be remodelled."

Alpha.—The subject mentioned by our correspondent is most important, and shall be noticed next week.

Mr. W. Dunnett Spanton.—Yes, condensed as much as possible.

DUTIES OF UNION MEDICAL OFFICERS.

To the Editor of THE LANCET.

SIR,—I should be glad to know the result of Mr. Hume's case, detailed in your journal of Feb. 10th. It appears from the report that the applicant had no legal claim whatever upon Mr. Hume's services. I can abundantly confirm what your annotation says, that "little may all patients who are said by their friends to be dying." I am very frequently sent for to "urgent" cases among the poor of my district, when there is no urgency at all. Only on Thursday last a messenger came to my surgery, requesting me to go to Catherine G——, a case of labour, and stating that "the child was born and the mother was *dead*." I went immediately, and found indeed the child born, but neither mother nor child in the slightest danger.

If you would state whether there were any further unpleasant consequences to Mr. Hume, you would oblige, Your obedient servant,

February 27th, 1866. F.R.C.S.

*** We believe Mr. Hume has been dismissed by the trustees, and has appealed to the Poor-law Board.

Prospective.—Decidedly the schools of Vienna and Paris before all others for the study mentioned by our correspondent.

C. R.—Dunglison's Dictionary of Medical Terms.

A Militia Surgeon.—We regret that we cannot furnish the information.

REMOVAL OF NUISANCES.

To the Editor of THE LANCET.

SIR,—Having read your paragraph headed "Horrida Bella," and having been put to some inconvenience through want of power to cause the immediate removal of nuisances in my country district, I should like, if you will permit me, to make a suggestion to the medical officers of the metropolis, who seem to be working together for the good of the public in this respect—viz., that all medical officers of union districts be made inspectors of nuisances for their respective districts, at a salary to be regulated by the amount of population, except in districts or towns where the salary could be sufficient for the appointment of a special qualified inspector.

In the town in which I live, a bankrupt baker, who has some sort of claim on the Corporation, is the appointed inspector of nuisances, and is, as I need hardly say, almost worse than useless.

If my professional brethren in London, who can move together and with some effect, will think of their country friends, who can only meet occasionally, and will bring this subject before Mr. Bruce and Sir George Grey in their "proposed amendment," I think they will confer a benefit on the public and the profession. Your obedient servant,

March, 1866. A POOR-LAW MEDICAL OFFICER.

VACCINATION ACT.

To the Editor of THE LANCET.

SIR,—I wish to place on record that if the new Vaccination Bill be not amended in Committee, the registration of successful cases of vaccination, and any statistical information to be derived therefrom, will be nearly as inefficient as in the present Act.

I am, Sir, your obedient servant,

March 1st, 1866. W. H. BUTTERFIELD, Registrar.

J. B. F. inquires where he can procure a glycerine transparent soap containing as much as thirty per cent. of glycerine?—a soap mentioned by Mr. Squire in his "Companion to the Medicine Chest."

Lex.—1. Yes, that is the law on the subject.—2. The Poor-law Board would not, save under exceptional circumstances, sanction the appointment of a gentleman who held but one qualification.

Indignans forgot to authenticate his communication.

ERRATUM.—Towards the end of our article of last week on Mr. Torrens's Bill occurs the expression "to *keep* the poor." It should have been "to *help* the poor."

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Brown-Séquard; Dr. Guy; Dr. Wilks; Mr. Henry Lee; Dr. Milton; Dr. Walker, Glasgow; Mr. Macdonnell; Mr. Deeley; Mr. Miller, Dunbar; Major Brine; Mr. Bell; Dr. Jeaffreson; Mr. Buckell, Riccall; Mr. Rawlings; Dr. Hurd, Yatton; Mr. Gray, Dr. Strong; Dr. Leishman, Glasgow; Mr. E. O. Greening, Manchester; Mr. M. Hetherington; Dr. Wiblin, Southampton; Mr. Packman; Mr. Wilson; Mr. Pratt; Mr. Williams; Mr. S. Smith; Mr. J. O'Connor, Wavertree; Mr. Nisbet; Mr. Hardy; Dr. Ashforth, Oakham; Mr. Bonnor; Mr. Rickards; Dr. Shettle; Mr. Clowes; Dr. Stokoe; Mr. Wallis, Boxhill; Mr. Butterfield; Mr. Ruding; Mr. Robinson; Mr. Rhind; Dr. Henry; Mr. Quarrell, Torquay; Dr. Morison, Wingate; Mr. Drury; Dr. Moorhead; Dr. Oliphant, Liverpool; Dr. Warwick, Southend; Mr. Mercier; Dr. Bland; Mr. Collins; Dr. Coates, Salisbury; Mr. Walker; Mr. Nason, Nuneaton; Mr. Prowse; Mr. Muller; Dr. Black, Oban; Mr. Payne, Paris; Mr. Parke; Dr. Scoffern; Mr. Keele; Mr. Gill; H. H.; M.; R. E. P.; W.; Fairplay; An Old University Student; Omega; J. W. C.; B. J.; A Correspondent; A Poor-law Medical Officer; Indignans; A Militia Surgeon; Workman; J. R.; An Assistant-Surgeon; W. R.; Alpha; J. E.; Mens Conscia Recti; F. H. S.; A Country M.D.; P. S.; M.R.C.P.; W. M. D.; Lex; R. E. P.; Fortis est Veritas; M.D. Parisiensis; &c. &c.

THE *Bolton Chronicle*, the *New York Medical Record*, the *Yorkshire Gazette*, the *Church of England Temperance Magazine*, and the *Investors' Guardian* have been received.

Medical Diary of the Week.

Monday, March 12.

ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 9 A.M. and 1½ P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Classification and Structure of the Mammalia."

Tuesday, March 13.

GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Frankland, "On the Non-Metallic Elements."
ETHNOLOGICAL SOCIETY OF LONDON.—8 P.M. Sir John Lubbock, Bart., and Mr. Fredk. Lubbock, "On the true Assignation of the Bronze Weapons." Rev. F. W. Farrar, "On the Adaptation of Races of Man."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M.

Wednesday, March 14.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Classification and Structure of the Mammalia."
MICROSCOPICAL SOCIETY.—8 P.M. Papers by Dr. Maddox, Mr. Tuffen West, Dr. Greville, and others.

Thursday, March 15.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
LONDON SURGICAL HOME.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Frankland, "On the Non-Metallic Elements."
HARVEIAN SOCIETY OF LONDON.—8 P.M. Dr. Meredith, "On the Duality of Venereal Ulcers."

Friday, March 16.

WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Classification and Structure of the Mammalia."
ROYAL INSTITUTION.—8 P.M. Mr. Balfour Stewart, "On the Evidence of the Existence of an Ethereal Medium pervading Space."

Saturday, March 17.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Rev. G. Henslow, "On Structural and Systematic Botany."
METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—7½ P.M.